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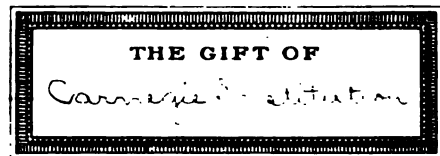
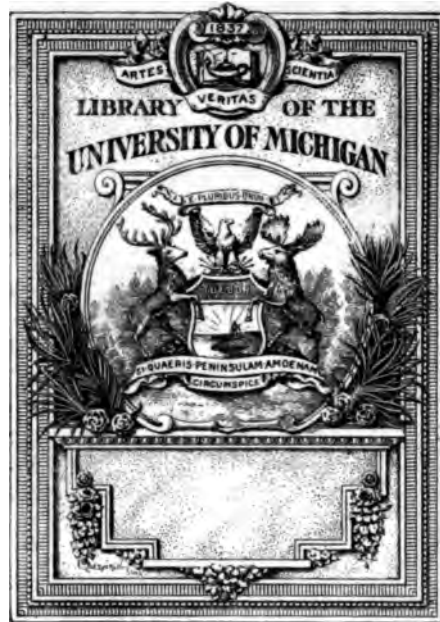
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CONTRIBUTIONS TO AMERICAN ECONOMIC HISTORY

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DEPARTMENT OF ECONOMICS AND SOCIOLOGY

OF THE

CARNEGIE INSTITUTION OF WASHINGTON

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History of Domestic and Foreign Commerce of the United States

BY

EMORY R. JOHNSON,
T. W. VAN METRE, G. G. HUEBNER, AND D. S. HANCHETT

With an Introductory Note by
HENRY W. FARNAM



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PART ONE

**THE FOREIGN TRADE OF THE
UNITED STATES SINCE 1789**

By G. G. HUEBNER

CHAPTER XXII.

SURVEY OF AMERICAN FOREIGN COMMERCE AT THE BEGINNING OF THE NATIONAL PERIOD.¹

American industries in 1790, 3. Foreign and domestic trade in 1790, 6. The status of the fisheries, 9. Conditions affecting American shipping, 10. Disadvantages of American shipping in competition with British shipping, 11. Commercial outlook in 1790, 12.

Before considering in detail the history of the foreign commerce of the United States during the period of national life under the Constitution, it will be helpful to survey the status of the industries and trade of the United States in 1789 and 1790. This will afford a fixed point from which to measure the progress antecedent and subsequent to the adoption of the Constitution.

The year 1789 was significant in the economic as well as the political history of the United States. The country was recovering from the business depression that had begun in 1785. The revival of industry from the setback of that year had been slow, but the country was in reality economically sound. Abundant available resources awaited development; and what was needed to enable business to expand was an effective government with power to provide itself with revenue, to establish public credit, to create a sound national currency, and to regulate interstate and foreign trade. The government under the Constitution, steadied by the judgment of Washington and guided by the financial and political genius of Hamilton, established conditions required for the internal development of the country.

The working out of international relations favorable to the foreign trade of the United States proved to be a more difficult task. Indeed, it was long after the second war with Great Britain that the United States first secured satisfactory commercial treaties with several important powers. The handicap which this placed upon the foreign trade of the United States was, as will be pointed out later, more than overcome, from 1793 to 1805, by the continental European wars that gave American merchants exceptional opportunities as neutral traders. The Constitution and the measures adopted early in Washington's administration enabled internal industry and trade to continue the growth that had started before 1789; but foreign commerce was given its first strong impulse by the continental wars.

The growth in population, by natural increase and by immigration, was rapid. The first census of the United States, taken in 1790, showed that there were 3,921,326 people in the country, of whom about five-sixths were white and one-sixth black. There had been an increase

¹This chapter was written by Emory R. Johnson.

of approximately 1,000,000 during the decade following the surrender of Yorktown. While the population was still mainly between the Atlantic and the Alleghenies, commonwealths were rapidly forming in Tennessee, Kentucky, and Ohio.

AMERICAN INDUSTRIES IN 1790.

A concise, though general description, of the industrial characteristics of the United States is contained in a *Report of a Committee of the Lords of the Privy Council on the Trade of Great Britain with the United States*. This official British document, dated January 1791, pictures conditions in the United States, in 1790, as they appeared to Englishmen, whose impulse would be to understate rather than to exaggerate, and thus their account has the merit of being conservative as well as contemporary. The report (pp. 29-31) states that:

"In that part of the United States situated to the south of Pennsylvania, there are no manufactures whatsoever except a few articles made of leather which they are enabled to manufacture from the low price of skins purchased by them. The Legislatures of the Northern and Middle States have passed laws and established Societies for the encouragement of Manufactures. The inhabitants of these States manufacture some coarse articles for their own use, but few for exportation. In the Southern and Middle States there is some wool, but of an inferior quality and much dearer than in Great Britain. In the States of New England, linen of a coarse sort has been made, and some of it has been exported for the use of other States. In New England and Pennsylvania there are many Iron works, some of them were established before the war, and nails and inferior sorts of iron tools have been manufactured, so as to diminish very much the importation from Europe.

"In New England and New York many sorts of household furniture are made and every kind of carriage in tolerable perfection, as well as some other articles, the materials of which are principally wood and iron. In New England & Pennsylvania attempts have been made to introduce cotton manufactures, but it appears from the specimens transmitted to the Committee that these manufactures are in general of the common sort, and much inferior in quality and dearer than those of Manchester. In Pennsylvania, paper mills have been erected, in which paper is made of a tolerable quality, sufficient for their own consumption, and some even for exportation: and in this State, Sugar refineries have also been established (some even before the war) with success, and they are now endeavoring to draw sugars from a particular kind of maple which they have in great abundance, and thereby to diminish the quantity of sugar imported from the West Indies. They brew porter in Pennsylvania, but of a very inferior quality.

"The inhabitants of all temperate climates will occasionally employ themselves in manufactures for domestic use, during such seasons of the year as their lands do not require their attendance. But these domestic occupations seldom rise to manufactures of any great extent. The people of the United States find much greater profit from the cultivation of the earth, and it is astonishing how much they prefer agriculture to manufacture."

For the most part, the industrial activities of the American people, in 1790, were the same as they had been throughout the eighteenth

century. Most people were engaged in agriculture. In New England, the fisheries were second only to agriculture. Throughout all the colonies many people devoted all or a part of their time to lumbering or securing other forest products. Ship-building and flour-milling were relatively important industries in the northern colonies; but most other manufacturing activities were carried on as domestic or small-shop and small-mill industries.¹ Factory processes were applied to some extent in the manufacture of iron and steel wares, woolen textiles, and shoes. There had been some diversification of manufactures during the Revolutionary War, but the restoration of peace soon checked the growth of the infant industries and no permanent industrial revolution resulted from the war. In general, the people of the United States, in 1790, were farmers and planters, fishermen, and traders. Manufacturing outside of the home or small shop and mill was relatively unimportant, although evidences of a change were at hand.

The best first-hand account of American industries at the beginning of the national period is to be found in *A View of the United States of America in a Series of Papers, Written at Various Times, Between the Years 1787 and 1794*, by Tench Coxe, who held in succession the offices of Assistant Secretary of the Treasury and Commissioner of the Revenue during Washington's first administration. His estimate of the relative rank of the agricultural, commercial, and manufacturing industries in America in 1787 was as follows:

"The commerce of America, including our exports, imports, shipping, manufactures and fisheries, may be properly considered as forming one interest. So uninformed and mistaken have many of us been, that it has been stated as our greatest object, and it is feared that it is yet believed by some to be the most important industry of New England. But calculations carefully made do not raise the proportion of property, or the number of men employed in manufactures, fisheries, navigation, and trade² to one-eighth of the property and people occupied by agriculture even in that commercial quarter of the Union. In making this estimate, something has been deducted from the value and population of the large towns for the idle and dissipated, for those who live upon their incomes, and for supernumerary domestic servants. But the disproportion is much greater, taking the Union at large, for several of the States have little commerce, and no manufactures—others have no commerce and scarcely manufacture anything. The timber, iron, cordage, and many other articles necessary for building ships to fish or trade—nine parts in ten of their cargoes—the subsistence of the manufacturers, and much of their raw materials are the produce of our lands. In almost all the countries of Europe, judicious writers have considered commerce as the handmaid of agriculture;

¹Tench Coxe stated in 1791 that there were "upwards of fifty paper mills" in Pennsylvania. The annual value of the output of these mills was \$250,000, and the persons employed in them did not exceed 150 or 200. This is an indication of the small scale on which manufacturing was conducted.

²This is explained by the author to include only those whose regular occupations are other than agricultural. Persons who engaged in manufacturing to some extent were "little more than half of the people of New England."

if true there, with us it must be unquestionable. The United States have yet few factories to throw into the scale against the landed interests. We have in our lands full employment for our present inhabitants, and instead of sending colonies to newly discovered islands, we have adjoining townships and counties whose vacant fields await the future increase of our people."¹

Manufactures, though relatively unimportant as compared with agriculture, and though carried on within the homes or in small establishments, were, as Coxe states, "great, various, and universal." It was the day of small things in industry; but, when every other man was an artisan skilled in some kind of work, the product was socially, as well as financially, of high value.

FOREIGN AND DOMESTIC TRADE IN 1790.

The total foreign trade of the United States in 1790 amounted to about \$39,000,000, the value of the exports being somewhat less than that of the imports. (See table 44, page 20.) Trench Coxe, writing in 1793, said:

"The imports of the United States consist in a small degree of necessities, in a great degree of articles of comfortable accommodation, and in some degree of luxuries; but the exports consist chiefly of prime necessities, with some articles of mere comfort and utility, and some of luxury."²

Over three-fourths of the value of the exports was contributed by breadstuffs, tobacco, rice, and lumber—breadstuffs comprising about 40 per cent of the total and tobacco over 20 per cent. Other important items were products of the fisheries, potash, salted meat, live animals, and indigo. The imports were composed mainly of manufactures of sugar, molasses, salt, and beverages. Seybert characterized them as consisting "chiefly of articles which habit and fashion have made necessary for our consumption; but a small portion of them is subservient to our arts and manufactures."³

At this time, as during the colonial period, the trade of the United States was mainly with British countries; in 1790 nearly half of the exports from the United States went to Great Britain and her dominions, while those countries were the source of over three-fourths of the imports. Nearly two-thirds of the foreign trade of the United States was with countries under the British flag. The anticipated shifting of the foreign trade of the United States from England to France after the Revolution did not take place, although the relations of the United States with France were cordial until 1793. In spite of the political friction with Great Britain and of the fact that the British West Indies were closed to American ships, British countries offered the best market for the exports of the United States and English manufacturers and traders supplied the people of America with most of their imported

¹Page 7.

²*View of the United States of America*, 434.

³Seybert, *Statistical Annals of the United States*, 156.

manufactures. Nine-tenths of the imports from Great Britain, in 1790, consisted of manufactures, in exchange for which the United States exported chiefly food, naval stores, and materials for use in manufacturing.

Although Great Britain refused to enter into a commercial treaty with the United States until 1794, and insisted on regulating her trade with the United States arbitrarily by executive decrees, she really looked with favor upon the large trade with America as long as it could be so regulated as to consist chiefly of the exchange of British manufactures for raw materials, naval stores, and such provisions as Great Britain desired to import. The fact that American commerce was large and was handled by British merchants and in British ships also inclined Great Britain to regard the American commerce favorably. It is true that Great Britain refused to open the trade between the United States and the British West Indies to American shipping and declined to put American commerce on as favorable a footing as British commerce was; nevertheless, the people of the United States enjoyed more favors in their trade with Great Britain than were accorded to the countries of the continent of Europe. The policy of excluding foreign shipping from the British possessions was one which Great Britain had insisted upon ever since the adoption of the Acts of Trade in the middle of the seventeenth century.

Nevertheless, the feeling in the United States was strong against Great Britain for closing her West Indies to American ships and for refusing to entertain a favorable commercial treaty. There was much sentiment in favor of adopting retaliatory measures against Great Britain. Madison incorporated this policy in the tariff bill of 1789, and the House of Representatives passed the bill with this feature included; but the Senate refused to sanction the plan of discrimination against the country with which the United States carried on the major share of its foreign trade. Jefferson was also an advocate of retaliation against Great Britain, and in the report which he made, in June 1792, as Secretary of State, at the request of Congress, upon the "State of the Commercial Intercourse between the United States and Foreign Countries," he urged the policy upon Congress. Jefferson, however, was opposed by Hamilton, whose influence both in 1789 and in 1792 prevailed with Congress and President Washington. It was fortunate for the country that Madison and Jefferson failed in their efforts to persuade the United States, at the beginning of our trade expansion under the effective National Government established in 1789, to begin a commercial war against the nation with which the people of the United States chiefly traded. It would have been almost as serious a blunder as Jefferson made in 1807, when he influenced Congress to lay an embargo on all American trade with Great Britain and France—an act that injured the United States far more than it did the countries it was intended to punish.

What the domestic and internal trade of the United States was in 1790 is not known, because no records of it were kept. It is certain that the traffic handled coastwise was much larger than that by land routes. The original States were all maritime, and the larger share of their population, even in 1790, was on or near the seaboard. When water routes are conveniently accessible, freight can be moved on them more cheaply than upon the best of highways; and, as there were practically no good roads in the United States until after 1790, both intrastate and interstate traffic must, whenever possible, have been transported by boats. Fortunately, the rivers, bays, sounds, and natural harbors of the Atlantic seaboard greatly favored the coastwise trade.

Contemporaneous writings indicate that much traffic was handled in small craft along the New England seaboard and upon such protected waterways as Long Island Sound, the Hudson River, the Delaware and Chesapeake estuaries and their affluent streams, and upon the Carolina rivers and sounds. Larger vessels carried traffic by the open sea between the New England and Middle States and between the northern and southern sections of the seaboard.

In 1789 the American tonnage enrolled for the coasting trade was over half that registered for the foreign trade; thereafter, for a number of years, the enrolled tonnage was about one-third of the registered. These figures for enrolled vessels do not include the considerable tonnage employed in the fisheries, nor the craft of less than 20 tons that were not required to enroll. It is probable that much local traffic was handled in boats of less than 20 tons register.

The ratio of the cargo tonnage of coastwise traffic to the cargo tonnage of foreign commerce would naturally be greater than the ratio of enrolled-vessel tonnage to registered tonnage, because the coastwise vessel, moving over a short route, would make more trips per annum than could the registered vessel engaged in the over-sea trade. Philadelphia, for example, had a relatively large foreign trade; but "the coasting vessels entered at the custom-house of Philadelphia in the year 1785 were 567 sail; all the other entries of sea-vessels in the same year were 501."¹

In spite of the absence of improved highways, there must have been a good deal of local and interstate highway traffic. Naturally, bad roads would be used more regularly and frequently by travelers than by shippers. The stage coach upon unimproved roads could at least divide passenger traffic with the small coastwise sailing vessels, and thus there was regular stage service in 1790 between the principal cities of the United States. The establishment of a wagon freight service by public carriers, except in rare instances, could hardly ante-

¹Coxe, *View of the United States*, 9 (note).

date the construction of good roads; and thus it may safely be assumed that such commodity traffic as was transported in wagons in 1790 was moved by the owners of goods being sent to, or brought from, the market.

Nevertheless, there must have been not only a local, but an interstate overland freight movement of some volume. "That interstate traffic by land had grown to considerable importance, before the meeting of the Constitutional Convention, is proved by the provisions in the tariff acts of the various States for regulating such traffic by duties upon goods thus brought into the several States, and by other measures."¹ As the population spread back from the seaboard into the interior of the States an increasing volume of goods had to be carried to and from distant markets by wagons. Sometimes the best market for an inland section would be within the same State, sometimes within an adjoining State.

STATUS OF THE FISHERIES.

The fisheries had been of basic importance to the foreign commerce of America during the colonial period. The condition of the industry at the close of the Revolutionary War is pictured as follows by Mr. Raymond McFarland:

"The fishing industry had been shaken to its foundation by a decade of inactivity and suspension. There had been rapid and disastrous depreciation of the property used for the furtherance of fishing interests. Wharves had fallen into decay, mainly through lack of trade to keep them in repair. Many vessels, too, had become valueless for the same reason; others had been employed in the privateering service, never to return as fishing vessels. Flakes and other shore apparatus used in curing fish had long since disappeared. Men, too, had lost the habit of their old vocation in following varying fortunes of service in the army and navy. The younger generation of boys had received little training in the shore fisheries, such as their fathers had, and none of them had acquired practical experience in deep-sea fishing by a trip to the Grand Bank as 'cut-tail' aboard a New England schooner."²

Nevertheless, in spite of the fact that the war had left the fisheries severely crippled, they seem to have recovered a large measure of their former prosperity during the ten years intervening between the close of the American Revolution and the outbreak of the continental wars in Europe. The cod fisheries, in particular, had probably regained the position they had held before the Revolution, but their development was held in check by the technical reservation of the British West Indies markets to Canadian and British fish. This policy was adopted by Great Britain in 1782 for the purpose of building up the fisheries of Canada, Nova Scotia, and Newfoundland, the rivals of the United States. The French government also discriminated against the fish-

¹Brown, *The Commercial Power of Congress*, 2.

²*A History of the New England Fisheries*, 130.

eries of the United States by giving bounties to French fishermen and by imposing high duties on foreign fish. But the superior natural advantages possessed by the fishermen of the United States enabled them to compete for the markets of the French West Indies and obstacles placed in the way of trade with the West Indies by both France and England were often evaded just as they had been during the years preceding the Revolution. Thus the New England cod fisheries were able to survive and, though the margin of profit was small, the industry gradually expanded. Although the average tonnage of the New England cod-fishing fleet and the average number of men employed thereon during the five-year period from 1786 to 1790 were roundly 30 per cent less than during the decade preceding the Revolution,¹ the total tonnage reached by 1790 was considerably greater than the average amount employed during the prosperous years between 1765 and 1775.

The whale fishery, however, did not regain its former prosperity during these years. England had always supplied the chief market for American whale products and had encouraged the colonial whaling industry by preferential import duties. After the Revolution, however, the English market was absolutely closed to the whale products of the United States and, unable to find a profitable market for a large quantity of whale oil and whale bone either at home or abroad, the whaling industry remained in a depressed state. In 1774 there were 300 whaling-vessels having home ports in Massachusetts; in 1789 the number was slightly more than 100.²

Congress granted bounties to the fisheries by the tariff act of July 4, 1789, and by the acts passed in 1790, 1792, and subsequently. The provisions of these laws and the alternating progress and retrogression of the fisheries after the enactment of the laws are considered in Volume II. In general, the international events of the last decade of the eighteenth century did not give the fisheries of the United States the opportunity to expand that was afforded the foreign commerce and the shipping engaged in the carrying trade of belligerent countries in and after 1793.

CONDITIONS AFFECTING AMERICAN SHIPPING.

During the colonial period, American shipping had prospered. The coasting trade and most of the commerce of America with the West Indies were handled by the colonial merchants and their ships. In the trade with Great Britain the merchants and shipping of England had the advantage of the colonists and had most of the commerce. For the commerce with southern Europe, colonial ships were mainly used. The effect of the Revolutionary War was much more severe upon American

¹*A History of the New England Fisheries*, 366.

²Tower, *A History of the American Whale Fishery*, 37, 42.

than upon British shipping, and when peace was restored, in 1783, the British merchants easily retained their superior position in the commerce between the United States and Great Britain; and in the same year, when the British Government closed the British West Indies to American shipping, the merchant shipping of the United States was seriously handicapped. The Congress, under the Articles of Confederation, was without power to regulate commerce or to aid shipping, and when the stronger National Government was established our maritime interests were still in a depressed though vigorous condition. Within a few years depression changed to prosperity.

The tonnage registered in the United States for the foreign trade in 1790 amounted to 346,254 tons. The enrolled coasting tonnage was 103,775, the fishing fleet included 28,348 tons, the combined total for the entire marine being 478,377 tons. During this year American vessels arriving from foreign ports made up 58.6 per cent of the total tonnage of entrances, and foreign vessels, mainly British, accounted for 41.4 per cent. That foreign shipping had not secured a larger share of American commerce during the trying years following the Revolution is proof of the maritime strength of the United States at that time.

In addition to the untoward political and monetary conditions from which the maritime and other industries of the United States were suffering at the close of the period of government under the Articles of Confederation, there were special disadvantages under which American shipping labored in competition with British shipping:

(1) Most marine insurance was written in England, and the rates on American vessels were usually higher than on those of British build. The insurance companies considered British vessels to be stauncher than American. Probably this was not the case, although the English ship was heavier and was more costly per ton of capacity than the American. It was felt by Americans, whether rightly or wrongly, that British patriotism had some influence upon marine insurance rates.

(2) The port charges which American ships had to pay in Great Britain were higher than British ships were required to pay in the ports of the United States. At the port of London, for instance, an American vessel of 160 tons register paid entrance and clearance fees ("light" money and "Trinity House" dues) of £9 6s. 2d. more than a British ship of the same tonnage would have to pay, in tonnage taxes and entrance and clearance charges, at an American port. Likewise, pilotage charges were lower in the United States. Furthermore, with the exception of the port of London, the charges at the ports of Great Britain were higher for American than for British ships, the American vessel's "light" and "Trinity House" charges being 1s. 9d. per ton greater.

(3) The restriction of the trade of the British West Indies to British ships reduced the profits of a relatively large share of American shipping. Prior to the Revolution the trade with the British and foreign West Indies had given employment to fully a third of the colonial shipping engaged in over-sea commerce. After the closing of the British West Indies to American ships, it became possible for the British merchants to dispatch their ships from England with cargo for the United States, to be exchanged there for exports to the West Indies, where a lading of sugar and other tropical products could be obtained for sale in Europe.

Congress promptly sought to offset these disadvantages of American shipping by the act of July 20, 1789, which placed much heavier tonnage taxes on foreign than on American ships, and which granted a rebate of 10 per cent in the duties payable on imports when the goods were brought into the country in American ships. It was estimated by British merchants that the discriminations imposed on their ships by the act of July 20, 1789, balanced the disadvantages under which American ship-owners competed with British shipping in the ports of Great Britain.

The discriminating legislation of 1789 and subsequent years undoubtedly was of great assistance to American shipping in meeting British competition. There was a steady, though not a phenomenally rapid, gain in the tonnage of the registered marine of the United States from 1790 to 1793, and a corresponding decline in the percentage of American commerce handled in foreign ships; but the rapid rise in the deep-sea tonnage under the American flag began in 1793-94 with the outbreak of the continental wars and with the consequent large opportunity for neutral carriers upon the high seas.

(4) In general, the commercial prospects were not especially promising in 1789 and 1790. Great Britain, with which country and with whose possessions the people of the United States had the major share of their trade, was actively hostile to American shipping. No treaty defining commercial rights and privileges could be made with Great Britain until 1794, and that treaty secured to the United States only a few of the privileges desired. The larger share of the foreign commerce of the United States was subject to such conditions as the British Privy Council might decree.

THE COMMERCIAL OUTLOOK IN 1790.

In 1790 it did not seem probable to the people of Europe, especially to the leaders of British political thought, that the United States would develop a large intercourse with other countries. Its trade with Great Britain was then less than at the beginning of the Revolutionary War; the American people were devoting most of their capital and labor to agriculture and were interested mainly in foreign trade as providing a market for their surplus products of agriculture. To such writers as

Lord Sheffield, the special champion of British shipping interests, it did not seem possible that any country could build up a foreign trade upon the basis of agricultural exports. European countries, under ordinary conditions, could at that time supply themselves with food products. Their purchase of grain from foreign countries was limited mostly to the years of small crops. It is true that the evidences of decline in British agriculture were plain, but still the British people had not then thought of becoming heavy purchasers of food.

American fisheries throughout the seventeenth and eighteenth centuries had provided the basis of a large foreign trade, but Lord Sheffield and the committee of the Privy Council that reported in 1791 felt certain that the fisheries of the United States would inevitably decline. The policy of Great Britain was to restrict all British markets to the British fisheries and, as this closed the largest export market for American fish, the prospect of continued commerce upon the basis of exported fish did not seem bright.

It was argued that, if there should develop a large European market for grain, England would not draw her supply from the United States; that the British settlements to the north and south of the United States would develop rapidly upon the stable political conditions existing in those sections; and that the people of the United States would not be able to compete successfully with Canada in supplying Europe with grain and lumber. It was likewise contended that Nova Scotia and Newfoundland would supply Europe and the West Indies with fish.

Nor did Lord Sheffield and the British Government think it possible for the people of the United States to establish a large trade with China and with the Orient. It was thought that the people of the United States were still too poor to provide a large market for "Asiatic luxuries," and thus the large direct trade which subsequently came into existence between the United States and the Orient was not foreseen.

It is, of course, clear that this pessimistic view of the future development of the commerce and fisheries of the United States was due to ignorance of the real industrial and commercial strength of the country in 1790; but one had to look below the surface to see what the future had in store. American commerce, shipping, and fisheries had contended against adverse conditions for most of the time since the outbreak of the Revolutionary War. The establishment of a vigorous national government with power to regulate commerce was encouraging, but it was too early to determine whether American traders, vessel-owners, and fishermen could prevail in competition with their rivals in Great Britain. In 1790 no one could foresee that three years later a long war would begin, involving most of the countries of Europe, and that American merchants and ships would consequently be given an opportunity to make great profits as neutral traders and carriers.

CHAPTER XXIII.

THE FIRST QUARTER CENTURY, 1790 TO 1815.¹

Activity in the foreign trade from 1790 to 1807, 14. Reasons for growth of export trade, 15. General growth of exports and imports, 20. Growth of Oriental trade and extension of trade into distant countries, 25. Growth of the carrying trade, 27. Decline of foreign trade and shipping, 1807-1815, 29.

By the time the Federal Constitution went into operation in 1789, the dullness which had characterized the foreign trade of the American Confederation during the years that ensued shortly after the conclusion of peace with Great Britain was almost overcome. A brisk foreign trade arose, the previous pessimism of the merchants and ship-owners was replaced by general optimism, and the unusual profits of trade and shipping drew into the foreign trade many who had formerly been engaged in other pursuits. Timothy Pitkin, one of the ablest of contemporary writers, recorded the surprising growth and effects of the foreign trade as follows:

"The increased demand for the agricultural productions of this country, during the period under review, raised their price to a height before unknown. This, as well as the trade in foreign productions necessarily created a demand for shipping, and agriculture, commerce and navigation, became the most lucrative employments, and almost exclusive objects of pursuit in the United States."²

During the later years of the period considered in this chapter, international reprisals and embargoes, the second war with England, and the restoration of peace in Europe adversely affected the American merchant and ship-owner. The quarter century 1790 to 1815 witnessed a complete commercial cycle in which the foreign trade underwent a distinct rise and fall.

The years of growing foreign trade, which extended from 1790 to 1807, were unique in that there has never been since, in the history of the United States, a period of such length in which the foreign trade so completely absorbed the attention of a large portion of the people and exercised so vital an influence on industry in general. The wider European market for foodstuffs caused a rise in the price of agricultural crops and a flow of capital and labor to the farms. Rising profits caused a similar flow into the shipping and carrying trades, and the brisk demand for deep-sea vessels revived the prosperity of the ship-building industry. Little progress was made in the manufacturing industries, however, during these years of growing foreign trade. The profits in agriculture, shipping, vessel operation, and ship-building were more attractive, and the rise in exports was accompanied by a growth

¹This and the succeeding chapters in this part were written by G. G. Huebner.

²A *Statistical View of the Commerce of the United States*, 372.

in the imports of European finished manufactures. The manufacturing industries did not become the object of special attention, until the embargoes and restrictive commercial policy, which became effective in 1807, ended the 18-year period of prosperous foreign trade and suddenly deprived the United States of many necessary articles previously obtained from abroad. It was not until then that the Federal Government endeavored to ascertain the state of the manufacturing industries of the country. In 1810 the value of their product was placed by the census at \$145,385,000. An estimate made by Tench Coxe placed the total value of all the manufactures of the country, including those of households, at \$198,614,000. It is probable that the value of the entire manufacturing product was not over \$200,000,000.¹ The fall in the foreign trade after 1807 gave the first great impetus to the home production of manufactures. After peace had been declared and European imports again entered American harbors, the so-called "American system" or protective-tariff doctrine rapidly gained ground and became a vital factor in the commercial policy of the nation.

REASONS FOR GROWTH OF EXPORT TRADE.

There were several reasons for the sudden change from the commercial depression of the years immediately following 1785 to the animated export trade which arose after 1789.

The adoption of the Federal Constitution in 1789 was an event of the highest commercial significance; it meant that the loose confederation was replaced by a real Federal Government. American ministers abroad had repeatedly found that foreign nations were "sensible of the weakness and inefficiency of the American Confederacy" and therefore refused to enter into commercial treaties or even to treat American merchants and ship-owners with the fairness accorded to those of other countries. John Jay, the American agent to England in 1785, referred to the situation as follows:

"This being the state of things, you may depend upon it, the commerce of America will have no relief at present nor, in my opinion, ever, until the United States shall have generally passed navigation acts. If these measures are not adopted, we shall be derided, and the more we suffer, the more will our calamities be laughed at."²

The views of two contemporary writers of note, Timothy Pitkin and Adam Seybert, are especially instructive. Timothy Pitkin stated:

"This unfortunate state of American commerce, it is well known, was one of the principal causes of the adoption of the present Constitution. The acts passed by the first Congress that met, under the new form of government,

¹This is an estimate by the U. S. Department of Commerce and Labor, in *Exports of Manufactures from the United States and their Distribution, 1800 to 1906*, p. 5.

²Letter to American Secretary of Foreign Affairs, October 21, 1785.

imposing the discriminating tonnage, and other duties, did not escape the particular notice of British statesmen. Their injurious effects upon the navigating interest of Great Britain were, at once, perceived by them. They saw that American commerce was no longer at the mercy of thirteen distinct legislative bodies, nor subject to the control of the King and Council."¹

Adam Seybert wrote as follows:

"Surrounded by difficulties, it became a paramount duty to cure the palsy which afflicted us at home. It was manifest, that general regulations were essential to the safety and welfare of the Union; it was absolutely necessary, that the power to regulate and control our intercourse with foreign nations, should be confided to Congress alone; and it was that conviction, which, principally, induced the people of the United States to call the Convention to revise the articles of the Confederation."²

By giving to the Federal Government the exclusive control over the "commerce with foreign nations, and among the several States, and with the Indian tribes," the Constitution laid the basis for removing the great political and governmental obstacles to prosperity in the foreign trade. Articles of commerce could thereafter move freely from one State to another and reach the ports of export without hindrance. The diverse system of import duties and navigation charges and regulations imposed by the individual States was replaced by a uniform national policy. The first Congress which met under the new form of government enacted a tariff and navigation act designed to promote foreign trade and ocean navigation. For the encouragement and promotion of the American deep-sea carrying trade, the act of July 1789 granted a 10 per cent discount from the duties on all goods imported in American vessels, and the same law reduced the duties on tea imported from India and China in American vessels as compared with the duties on tea imported from Europe or in foreign vessels, so as to build up the direct trade between the United States and the Orient. Though slightly changed from time to time, this act extending aid to Oriental commerce and protection to the American merchant marine was in force throughout the entire quarter century from 1789 to 1815, and, as is more fully pointed out hereafter, its effects upon the foreign trade and the American merchant fleet were highly beneficial. In 1804 Congress further extended the policy of shipping protection by levying a "light money" tonnage duty of 50 cents per ton on foreign vessels.³

After the adoption of the Federal Constitution, moreover, foreign nations could no longer scorn requests for commercial treaties and trade arrangements. The trade with Great Britain had since 1783 been carried on according to the Orders in Council authorized by the Parliamentary act of April 1783, no commercial treaty being concluded

¹A *Statistical View of the Commerce of the United States*, 191.

²*Statistical Annals*, 1818, p. 58.

³This was raised to \$1.50 in 1812 as a war revenue measure.

until November 1794. The so-called Jay treaty, which was concluded at this time, provided that no higher tariff duties should be paid by either country than were paid by all other countries, with the reservation on the part of England permitting Parliament to levy tonnage duties on American vessels as high as those paid by British ships in American ports, and tariff duties which would be adequate to counter-vail the discriminating duties payable on goods imported into the United States respectively in American and foreign ships. Although this treaty, which was not enforced until 1797 and the trade sections of which expired in 1804, never proved satisfactory to the United States, because it did not place American and British vessels and merchants in the West India trade on an equal footing and did not prevent the British Government from levying countervailing duties designed to offset the discriminations which existed in the American tariff laws, it was nevertheless a concrete illustration of the difference between the power of the Confederation and that of the Federal Union. In 1795 the Federal Government negotiated with Spain a treaty which granted the right of free navigation of the Mississippi River to the people of the United States. A treaty of commerce and navigation was concluded with France in September 1800, as were also a secret treaty concerning Louisiana in October 1800 and the Louisiana cession treaty, which in April 1803 finally solved the problem of the free navigation of the Mississippi River. A commercial treaty was concluded with Prussia in July 1799; and in 1795, 1796, and 1805, after much negotiation and some naval warfare, treaties of commerce, peace, and amity were entered into with Tripoli and Algiers, the piratical African Barbary States.

The adoption of the Constitution, which enabled Congress to promote American trade and navigation by legislation, was followed by the gradual acquisition of a navy to protect the merchant and ship-owner against foreign enemies. The few armed vessels which were the property of the United States Government at the end of the Revolutionary War had been sold by order of Congress.¹ The depredations on American commerce by the Barbary pirates, which had been made during the period of the Confederation, greatly increased after 1793, when Portugal, under a truce with the regency of Algiers, withdrew the squadron of warships which had occupied the Straits of Gibraltar. The attacks on American merchant ships, which had practically no men-of-war to protect them, became so serious that Congress authorized the construction of a small fleet. The unusually violent attacks of the Barbary pirates in 1801 caused the United States to deal swift and vigorous punishment. By 1805 the American naval forces had compelled all of the Barbary powers to agree to cease their depredations on American merchant vessels.

¹Act of June 3, 1785.

The building of a war fleet was also hastened by the hostile attitude of France and Great Britain, whose naval vessels at various times during the European wars seized American merchant ships on the pretext that they violated the then indefinite and flexible laws of neutrality. During 1799 and 1800 several American warships were used effectively in a brief naval war with France. The prompt and vigorous measures of the newly established government in defense of its commercial rights soon compelled France to seek peace, and at the same time instilled in other foreign nations an increased respect for the American flag. When later the seizure of American ships, the exercise of the right of search, the indiscriminate imposition of blockades, and other acts of England and of France became unbearable, the War of 1812 ensued and Europe was given more convincing evidence of the intention of the new government to protect American foreign trade and navigation.

The adoption of the Constitution and the inauguration of the policy of aid and protection by the Federal Government were accompanied by other economic influences which were responsible for much of the immediate growth in foreign commerce. Foremost among these were the extended European wars, which began in 1793, shortly after the outbreak of the French Revolution, and were not finally concluded until 1814. At first these wars concerned chiefly Great Britain and France, but gradually nearly all the nations of the Old World were drawn into the controversy. What was all but commercial death to the European merchant and ship-owner meant profit to the American, for the wars cut off the usual channels of European trade so effectively that to obtain many of their customary imports the warring nations were obliged to turn to the United States, a neutral power. When the European wars were at their height American shipping was prosperous; when in 1802 and 1803 there was a brief period of peace, it suffered an immediate decline; when the wars were renewed, prosperity returned for a time, until after 1807, when Napoleon Bonaparte, refusing to recognize that there were any neutrals, inflicted his "continental policy" upon the commercial world, and England enforced her Orders in Council with men-of-war. Under the burdensome restrictions imposed by the commercial policies of France and Great Britain, American vessels and American trade suffered almost as severely as those of European neutral countries. When neutrality was denied exports carried in American ships, the highly profitable business of the ship-owners, merchants, and ship-builders of the United States was interrupted.

The European wars were accompanied by European crop failures and insufficient food. Although the most rapid increase in the foreign trade after 1790 was in the reexportation to Europe of foreign products which American merchants and vessels gathered from the West Indies, South America, the Orient, and other parts of the world, there was

also an increase in the shipments of domestic foodstuffs to Europe, where crop failures occurred at various times and where the effects of shortage were largely enhanced by the necessity of feeding immense armies of soldiers.

Partly as a result of the European wars and the abnormal demand for American foodstuffs abroad, there was an increase in the output of agricultural products in the United States. During the first decade after 1790 the growth in agriculture was chiefly east of the Alleghenies and the surplus was readily exported. The effect of the heavy export trade upon food prices is illustrated by the prices of flour at Philadelphia, which was then a typical market. The average price from 1785 to 1793 was \$5.41 per barrel, while the average price from 1793 to 1807 (excluding the years 1802 and 1803, when Europe was at peace) was \$9.12 per barrel, a difference of \$3.71.¹ It is noteworthy that during the years 1820 to 1828, after the trade and industry of Europe had returned to its ordinary channels, the average price dropped back to \$5.46. After 1800, when the foreign trade received numerous setbacks, westward emigration revived, the volume of foodstuffs produced in the country west of the Alleghenies also increased rapidly, and great quantities of flour, grain, and provisions were sent down the Mississippi River to be exported to Europe from New Orleans. After 1803 the exports from the Michigan territory exceeded those from such States as New Hampshire, Vermont, and Delaware; and in 1807, when the export trade moving down the Mississippi River from the Middle West was at its height, the value of the shipments to foreign markets from New Orleans aggregated \$4,321,000.

The banking and credit situation was greatly improved after 1790. In the past the absence of adequate credit in the countries of continental Europe had tended to limit the import trade largely to England, where credit relations had long been established.² By restricting the imports from the markets of continental Europe, the insufficiency of credit had also had an unwholesome effect upon American exports to those markets. Inadequate banking facilities had, moreover, exerted an unfavorable influence upon investments in agriculture, shipping, and other industries. When the Constitution was adopted, the only banks in the United States were the Bank of North America, the Bank of New York, and the Bank of Massachusetts. In February 1791, however, Congress created the Bank of the United States. The charter of this institution expired in March 1811, but before its termination many State banks were established. From a total of 3 State banks in 1791, with a capital of \$2,000,000, the number grew to 88 in January 1811, and the capital to \$42,610,000; and in January 1815 there were 208 State banks, with an aggregate capital of \$82,259,000.

¹Pitkin, *A Statistical View*, etc., 373.

²Coxe, *A View of the United States of America*, 128.

GENERAL GROWTH OF EXPORTS AND IMPORTS.

Table 44 indicates how the value of the export trade, inspired by the events enumerated above, rapidly advanced from slightly over \$20,200,000 in 1790 to over \$94,100,000 in 1801, how it was then depressed for a few years because of temporary peace in Europe, and thereafter rose again, reaching its climax in 1807 with a total of \$108,343,000.

TABLE 44.—*Total foreign trade of the United States, 1790-1815.*¹

Year.	Domestic exports.	Foreign exports.	Total exports.	Imports retained for domestic consumption.	Total imports.
1790	\$19,666,000	\$539,000	\$20,205,000	\$22,461,000	\$23,000,000
1791	18,500,000	512,000	19,012,000	28,688,000	29,200,000
1792	19,000,000	1,753,000	20,753,000	29,747,000	31,500,000
1793	24,000,000	2,110,000	26,110,000	28,990,000	31,100,000
1794	26,500,000	6,526,000	33,026,000	28,074,000	34,600,000
1795	39,500,000	8,490,000	47,990,000	61,267,000	69,756,000
1796	40,764,000	26,300,000	67,064,000	55,136,000	81,436,000
1797	29,850,000	27,000,000	56,850,000	48,379,000	75,379,000
1798	28,527,000	33,000,000	61,527,000	35,552,000	68,552,000
1799	33,142,000	45,523,000	78,665,000	33,546,000	79,069,000
1800	31,841,000	39,130,000	70,971,000	52,122,000	91,253,000
1801	47,473,000	46,642,000	94,115,000	64,721,000	111,364,000
1802	36,708,000	35,775,000	72,483,000	40,558,000	76,333,000
1803	42,206,000	13,594,000	55,800,000	51,073,000	64,666,000
1804	41,467,000	36,232,000	77,699,000	48,768,000	85,000,000
1805	42,387,000	53,179,000	95,566,000	67,421,000	120,600,000
1806	41,253,000	60,283,000	101,536,000	69,127,000	129,410,000
1807	48,700,000	59,643,000	108,343,000	78,856,000	138,500,000
1808	9,433,000	12,997,000	22,430,000	43,993,000	56,990,000
1809	31,406,000	20,797,000	52,203,000	38,602,000	59,400,000
1810	42,366,000	24,391,000	66,757,000	61,009,000	85,400,000
1811	45,294,000	16,022,000	61,316,000	37,377,000	53,400,000
1812	30,032,000	8,495,000	38,527,000	68,535,000	77,030,000
1813	25,008,000	2,847,000	27,855,000	19,157,000	22,005,000
1814	6,782,000	145,000	6,927,000	12,820,000	12,965,000
1815	45,974,000	6,583,000	52,557,000	106,458,000	113,041,000
1816	64,782,000	17,138,000	81,920,000	129,964,000	147,103,000
1817	68,313,000	19,358,000	87,671,000	79,892,000	99,250,000

¹Seybert, *Statistical Annals*, 93; DeBow, *Statistical View of the U. S.*, I, 326; Pitkin, *A Statistical View*, 35.

The most rapid growth and most violent fluctuations occurred in that portion of the export trade which consisted of the reshipment of foreign products. Being neutral, the vessels of the American flag were, with occasional interruptions, permitted to reexport to continental European countries and to England the large quantities of sugar, tea, coffee, cocoa, pepper, and other tropical and subtropical articles and the gold and silver specie and bullion which American merchants obtained in the West Indies, South America, the Orient, and other parts of the world. In times of peace these articles were shipped directly from the producing countries to European destinations

in foreign vessels. They were now shipped to American ports in American vessels, subjected to the payment of import duties, and then reshipped in American vessels after receiving a drawback of all but a small part of the duties that had been collected. This indirect process gave to the foreign cargoes thus reexported the stamp of neutrality. In the case of the British East India trade, the treaty of November 19, 1794, provided "that vessels of the United States shall not carry any of the articles exported by them from the said British territories to any port or place except to some port or place in America, where the *same shall be unladen.*" In accordance with this treaty clause it was a common practice for American ships to proceed to the British East Indies, either direct from Europe (if the war permitted) or by way of an American port, and to return to Europe after having "unladen" their East India cargoes at an American port, paying the required import duties, receiving a drawback, and reshipping the temporarily unloaded cargoes.

European and English products were also brought to American ports and reexported in American bottoms to the various outlying dominions of England and other European powers. In 1805, for example, the reexports of foreign products to the Spanish West Indies and American colonies of Spain were valued at \$8,476,000, while the shipments of domestic commodities amounted to but \$2,391,000.¹

The value of the total reexport trade advanced from \$539,000 in 1790 to \$46,642,000 in 1801; it then declined for a few years while peace prevailed in Europe; but when the wars were resumed, it again increased, reaching a maximum of \$60,283,000 in 1806. Never before or since has the reexport trade reached such proportions. As is shown in table 44, during many of these years it was greatly in excess of the entire foreign trade in domestic products.

Though the export trade in purely domestic commodities increased less rapidly than the reexport trade, yet it also felt the favorable influence of the events enumerated above. From a value of \$19,666,000 in 1790, the exports of domestic commodities rose to a value of \$48,700,000 in 1807. Of the amount for the later year, \$37,832,000 consisted of agricultural products, \$5,476,000 of forest products, \$2,804,000 of products of the sea, and \$1,652,000 of manufactures. There were numerous changes in the relative importance of the commodities entering the export trade. In the North Atlantic States the products of the sea lost the lead to products of agriculture. Flour, wheat, corn, and provisions found a ready market in southern Europe, where crop failures were most frequent and the ravages of war most disastrous, and more than the usual shipments were made also to Holland, the Hanse Towns, England, and the West Indies. The exportation of fish to South European and West Indian markets continued, but the fish

¹Seybert, *Statistical Annals*, 136. Corresponding figures in trade with French West Indies were \$3,975,000 and \$2,770,000, respectively.

trade was not as large as the trade in agricultural products. Naval stores, furs, and skins likewise lost their former high position in the foreign trade of the North Atlantic States, but the losses occasioned by their decline were more than made good by the increase in the exports of the other important forest products—lumber and pot and pearl ashes. For lumber in particular a spirited demand arose on account of the European wars, the exports increasing steadily until in 1811, when they reached a value of \$3,195,000 out of a total value of \$5,286,000 for all the forest products exported that year. In the South the tobacco export trade continued to maintain an annual value of over \$6,000,000. Southern rice also found a ready market in England, Holland, Bremen, and Hamburg, but the indigo trade of South Carolina and Georgia almost disappeared and the export trade in southern naval stores made little headway. A new southern export, however, a commodity destined to exercise a more potent influence on the economic and political history of the country than any other product of its soil, was making its first advance toward a position of importance in the foreign trade. This product was cotton. After the invention of the cotton-gin in 1793, the success of cotton production was so pronounced that by 1803 tobacco, which had been the great staple of the South for nearly two centuries, lost its leadership and cotton became the king of southern exports. It was shipped to Great Britain, France, Holland, Germany, Russia, Sweden, Spain, and a few minor markets, the total exports rising from a value of \$5,250,000 in 1802 to \$15,108,000 in 1810, and \$17,529,000 in 1815. Of all the events influencing the development of foreign trade during this period, none has contributed more to its permanent increase than the invention of the Whitney cotton-gin.

on later The export trade continued to center very largely in the old Atlantic States which had always led in foreign commerce, but important changes in their relative position occurred. The paramount position of the Southern States of Virginia and Maryland was definitely yielded to the North Atlantic States of New York, Massachusetts, and Pennsylvania. Pennsylvania, however, which at the beginning of this commercial era led all the other States in the volume of exports, soon fell behind New York. During the period 1790 to 1800 the largest volume of exports was shipped from New York, which was followed by Pennsylvania, Maryland, Massachusetts, and Virginia, in their respective order. During the next decade the position of these States remained unchanged, except that Pennsylvania lost precedence to Massachusetts.¹

Meanwhile, after the year 1800, as was mentioned above, the farming regions beyond the Alleghenies, which had formerly shipped small

¹Evans (compiler), *Domestic Exports, 1789-1883*, p. 98; DeBow, *Statistical View of the United States* (Compendium of U. S. Census, 1854), p. 187.

quantities of farm and forest products to the Eastern States and occasionally to the West Indies, southern Europe, and the Mediterranean islands by way of New Orleans and Mobile,¹ became a more important factor in the export trade. The export trade of Tennessee and Mississippi dates from 1801, that of Kentucky and Indiana from 1802, of Michigan from 1803, Orleans Territory 1804, and Ohio 1806.² The products of these newly opened regions had to be floated down the Mississippi River and be transshipped at New Orleans, but, in spite of the serious handicap of inadequate transportation,³ increasing quantities of provisions, flour, grain, whisky, and forest products were shipped to Europe. The exports from New Orleans, including those originating in the adjacent region as well as those received from the Middle West in 1807 (\$4,321,000), exceeded those from eastern and southern States, such as Georgia, North Carolina, Connecticut, Rhode Island, and New Hampshire, the merchants of which had long been engaged in the foreign trade and were within easy reach of the Atlantic seaboard.

The abnormal increase in the export trade was accompanied by a rapid growth of foreign imports. The total value of the commodities imported advanced from \$23,000,000 in 1790 to a maximum of \$138,500,000 in 1807. (See table 44.) Since this included vast quantities of commodities which were imported merely to be reshipped abroad as neutral goods, the real increase in imports is more fairly represented by those imported products which were retained for consumption in the United States. But the value of this branch of the import trade also advanced from \$22,461,000 in 1790 to \$78,856,000 in 1807. Throughout this entire era of active foreign trade the imports retained for home consumption always exceeded the exports of domestic products, and the total import trade at all times exceeded the total export trade by many millions.

The leading items in the import trade were European and English manufactures, consisting chiefly of metal goods, woolen, cotton, linen, and silk textiles, and glass, paper, leather, earthen, and other miscellaneous finished products. English manufactures continued to dominate the American market, but the fabrics and metal goods of continental Europe, especially those of Germany, were received in large quantities, and at various times threatened to drive out those of Great Britain. The remaining imports consisted mainly of luxuries and other articles for domestic consumption. Sugar, molasses, rum, and coffee were brought from the West Indies; wines from southern Europe; specie and bullion from Mexico, the West Indies, Peru; and many other lands; teas, silks, paper, and general spices from the Orient; hides and skins, coffee, and indigo from South America.

¹U. S. Census, 1880. *History and Present Conditions of New Orleans*, 11-21; DeBow, *Industrial Resources of the Southern and Western States*, III, 480; I, 48.

²DeBow, *Ibid.*, I, 316.

³For discussion of the opening of the Mississippi River for western navigation, see vol. I, chap. xlii.

The apparently unfavorable balance of trade had little trade significance. Adam Seybert, the contemporary writer previously referred to, wrote as follows:

"Our commerce with all parts of the world collectively taken, has produced an apparent unfavorable balance, amounting to \$15,229,000 per annum; but this sum we find, was counter-balanced by the profits for freight alone. That the foreign commerce of the United States was very profitable, is evident from the general improvement of the country, the conditions of the people, and the extension of our cities in every state of the Union. Besides the gain for freight, our merchants received considerable sums for commissions and charges; and it has been ascertained, that great profits were made on the merchandise which they disposed of in Europe. To the above mentioned, we must add considerable sums remitted to us in specie from the West Indies and South America, of which our custom-houses make no returns. That much bullion and coin were brought into the United States is proved by the amount of our exports to China and the East Indies."¹

The great bulk of the foreign trade—export as well as import—centered in the long-established markets of England, Continental Europe, and the West Indies. Relative to the total foreign trade of the United States, the West Indies lost the leading position which they had held in the commerce of the American colonies, but were second only to England and Europe as markets for American exports and as sources of a lucrative import trade. The least progress was made in the British West India trade, which continued to be hampered by British restrictions. Prior to 1794, American vessels were excluded from the British West Indies, the policy of England being to enable British ships to engage in a triangular trade between England, the United States, and the British islands. An article of Jay's treaty as drafted provided that American vessels "not being above 70 tons" should be permitted to enter the trade on condition that they would not carry molasses, sugar, coffee, cocoa, or cotton to any part of the world except the United States; but this article of the treaty was rejected by the United States Senate and the trade with the West Indies remained technically open only to British vessels. The pressure of the wars, however, compelled England from time to time to open her West India ports to American vessels, and from 1795 to 1807 exports valued at from \$2,147,000 to \$9,699,000 were annually shipped to these islands and imports valued at from \$2,925,000 to \$6,968,000 were received from them.²

The trade with the French, Dutch, Danish, and Spanish West Indies was highly prosperous until 1807, when the American reexport trade to Europe was restricted and the French islands fell into British control. The imports received in each case far exceeded the exports shipped from the United States to the islands. The restrictions of the French colonial policy were partially withdrawn in 1793, and the French West India ports were opened to American merchants and

¹*Statistical Annals*, 281.

²Pitkin, *A Statistical View*, 193, 211.

vessels. During the years 1795 to 1807, the annual shipments from the United States to the French Islands were valued at from \$2,776,000 to \$7,148,000, the bulk of which consisted of foreign (European) produce; and the products annually imported from the French West Indies were valued at from \$2,022,000 to \$15,751,000, most of which were reshipped to Europe. Similar amounts were annually imported from and exported to the Spanish West Indies, while the trade with the Dutch and Danish West Indies was smaller in volume.

GROWTH OF ORIENTAL TRADE AND EXTENSION OF TRADE INTO DISTANT COUNTRIES.

Though the great bulk of the foreign trade of this quarter century was carried on in the long-established markets of European countries and the West Indies, there was at the same time a spectacular growth of American trade in the Orient, which was in many respects one of the most noteworthy features of the early commercial history of the United States. This trade had its beginning during the previous period.¹ As early as 1789 there were as many as 47 American vessels trading at one time beyond the Cape of Good Hope. In that year Congress enacted a tariff law explicitly designed to promote the Oriental trade and to confine it to American ships. It levied duties² of 6 to 20 cents per pound on tea brought direct from India and China in American vessels, while the duties on tea imported indirectly by way of Europe ranged from 8 to 26 cents, and those on tea imported in foreign vessels ranged from 15 to 45 cents per pound. The duties on other Oriental commodities, when imported in foreign vessels, were likewise almost twice the duties on goods imported in American ships.

It was from the Oriental trade that the famous "merchant princes" of the day secured their large fortunes. In this trade they employed their most shrewd and daring captains and their best ships, and on the rich cargoes which their vessels brought home from the East they realized their greatest profits. Furthermore, many of the Oriental products formed the basis of new domestic industries, such as silk finishing, morocco leather, and dyeing.³ Teas, silks, nankeens, and chinaware from Canton; coffee, pepper, and other spices and low-priced cotton goods from British India were imported in large quantities. In addition to the ready home market found in the Atlantic Coast States, the European wars, as was explained above, opened an even greater foreign market. The total direct imports from the British East Indies grew from a value of \$742,500 in 1795 to \$3,391,000 in 1800, and had an annual average of \$3,106,000 during the six years 1802 to 1807; those from the Dutch East Indies advanced from \$26,700 in 1795 to \$4,431,000 in 1801; and those from China grew from \$1,023,000 in 1795 to \$4,613,000 in 1800 and \$5,745,000 in 1810.

¹See vol. I, chap. xi, p. 185.

²G. G. Huebner, "Tariff Provisions," etc., in *Annals of American Academy of Political and Social Science*, May 1907, p. 61; also *infra*, II, chap. xli.

³See Soley, in Shaler, *United States of America*, I, 525; Chase, *Report*, 35.

The exports of merchandise to China and the East Indies increased somewhat, but were almost negligible in volume. During the years 1795 to 1807 they ranged from \$261,700 to \$2,129,000 per year, and consisted mainly of foreign products—opium, woolen and cotton goods, and quicksilver. The chief domestic merchandise shipped to the East consisted of furs, ginseng, cotton goods, and raw cotton to China; and flour, whale oil, candles, timber, lumber, and tobacco to the East Indies. Most of the shipments to the Orient consisted of gold and silver specie, and much of this was obtained from abroad. The primary object of this early Oriental trade was to build up large fortunes by the sale of Oriental imports in the United States and Europe, rather than to find markets for American exports. In China the trade was conducted through the famous "Chinese Hongs;" and in the East Indies it was likewise mostly a bartering trade with native merchants. Productive of great profits, but often of great losses, uncertain and surrounded by constant difficulties, the romantic trade with China and the East Indies immediately after the formation of the Union was by far the most interesting feature of early American commerce.

China and the East Indies (including British India) were foremost in the newly established commerce, but American trade was also extended to other distant countries. As early as 1790 a small trade was conducted as far north as Japan; and direct trade with the Philippine Islands began about 1796, when Elias Hasket Derby, of Salem, obtained a cargo of sugar, pepper, and indigo at Manila.¹ The sandalwood trade with the Hawaiian Islands, which began as a link in the Chinese trade via the northwest Oregon coast in 1789, increased after August 1790, when the *Columbia* returned to Boston after having completed a successful voyage via Cape Horn to the Oregon coast, Honolulu, and Canton.² The trade at the Cape of Good Hope, in Turkey, the Levant, Egypt, Senegal, the northwest coast of North America, Bourbon, Mauritius, Honduras, Campeachy, Morocco, and the Barbary States was now regularly listed in the customs records.³ Though acts restricting the African slave trade were passed in 1794, 1798, 1800, 1803, and 1807, this trade also continued to flourish. To Charleston and other southern ports came dozens of shiploads of enslaved negroes who were purchased or kidnaped on the African coast and carried directly to the United States to be used on the cotton plantations. Many of the vessels engaged in the slave trade belonged to people of New England and New York, who reaped large profits from their nefarious traffic.

¹Marvin, *The American Merchant Marine*, 204.

²*Ibid.*, 68; Carpenter, *America in Hawaii*, 29-35; Jarvis, *History of Hawaiian Islands*, 68-79; Blackman, *The Making of Hawaii*, 187.

³Seybert, *Statistical Annals*, 132-140.

GROWTH OF THE CARRYING TRADE.

No phase of the foreign trade during the prosperous years 1790 to 1807 was more noteworthy than the rapid growth of the carrying trade. The bases upon which the marine and ship-building industries of the country rested, were, as during colonial days, the abundant supply of timber and naval stores suitable for the building of cheap and excellent wooden vessels, the natural maritime instincts of a large portion of the inhabitants, and a coast line indented with scores of natural bays and harbors. The unusual growth of the carrying trade at this particular time, however, was due largely to the extraordinary opportunities arising from the circumstances referred to above. Quick to embrace these opportunities, the American ship-owners pushed their advantage to the utmost and enjoyed a degree of prosperity never before or since equaled.

The adoption of the new form of government in 1789 tended to restore the confidence and credit which are essential to the development of maritime industries, and the newly acquired navy, though small, afforded a certain amount of protection to American merchant ships. The provisions which from 1789 to 1815 were incorporated in the tariff laws, granting a discount of 10 per cent of the duties on all goods imported in American ships and especially favoring American vessels in the Oriental trade, practically restricted most of the ordinary deep-sea traffic of the United States to the American flag. Great Britain imposed countervailing duties which to some extent offset the effects of the policy of shipping protection, the Committee on Commerce and Manufactures of the House of Representatives admitting that "Great Britain by her countervailing acts has secured effectually the carrying (for her own wants and her foreign commerce) of our fish, oil, tobacco, pot and pearl ashes, rice, indigo, and cotton." The countervailing restrictions of England, however, were effective only during times of peace, which from 1790 to 1814 were infrequent and short-lived. On the whole, the policy of protection to shipping tended to increase the American carrying trade. As stated by Adam Seybert:

"Our discriminations operated powerfully in favor of our shipping. . . . Those extra charges were sufficient to drive from our ports, the greatest proportion of the foreign tonnage. All foreign nations were affected by the system we had adopted; it seemed to operate like magic in favor of ship-owners in the United States."¹

The European wars, even more than the policy of shipping protection, gave a most powerful impetus to the American carrying trade at this particular time, for they effectively locked the merchant ships of the great commercial powers of Europe in their harbors. Professor J. B. McMaster picturesquely describes the situation:

¹*Statistical Annals*, 294.

"Almost the whole carrying trade of Europe was in their (American) hands. . . . The merchant flag of every belligerent, save England, disappeared from the sea. France and Holland absolutely ceased to trade under their flags. Spain for a while continued to transport her specie and her bullion in her own ships protected by her men-of-war. But this too she soon gave up, and by 1806 the dollars of Mexico and the ingots of Peru were brought to her shores in American bottoms. It was under our flag that the gum trade was carried on with Senegal, that the sugar trade was carried on with Cuba, that coffee was exported from Caracas, and hides and indigo from South America. From Vera Cruz, from Carthagen, from LaPlata, from the French colonies in the Antilles, from Cayenne, from Dutch Guiana, from the isles of France and Reunion, from Batavia and Manila, great fleets of American merchantmen sailed from the United States, there to neutralize the voyage and then go on to Europe. They filled the warehouses at Cadiz and Antwerp to overflowing. They glutted the markets of Embden and Lisbon, Hamburg and Copenhagen, with the produce of the West Indies and the fabrics of the East, and, bringing back the products of the looms and forges of Germany to the New World, drove out the manufactures of Yorkshire, Manchester and Birmingham."¹

Table 45 shows how rapid was the growth of the carrying trade.

TABLE 45.—Statistics of shipping engaged in the carrying trade of the United States, 1789-1815.

Year.	Total tonnage ¹ in foreign trade of United States.	Tonnage of American ves- sels in foreign trade.	Proportion American.	Value of foreign trade— proportion in American vessels. ²		
				Imports.	Exports.	Total.
1789	³ 233,983	³ 127,329	54.4	17.5	30	23.6
1790	603,825	355,079	58.6	41.0	40	40.5
1793	611,320	447,754	73.3	82.0	77	79.5
1795	637,109	580,277	91.1	92	88	90
1800	806,753	682,871	84.6	91	87	89
1805	1,010,141	922,298	91.3	93	89	91
1807	1,176,198	1,089,876	92.7	94	90	92
1810	986,750	906,434	91.9	93	90	91.5
1811	981,450	948,247	96.6	90	86	88
1812	715,098	667,999	93.4	85	80	82.5
1813	351,175	237,348	52.0	71	65	68
1814	107,928	59,626	55.3	58	51	54.5
1815	917,227	700,500	76.4	77	71	74

¹Seybert, *Statistical Annals*, 318; Pitkin, *A Statistical View*, 363.

²Soley, "Maritime Industries of America," in Shaler, *The United States of America*, I, 522, 527, 534, 536.

³For period from July 20 to end of calendar year 1789.

The increase in the gross tonnage of the American deep-sea fleet during the first four years following the adoption of shipping protection was not as great as the statistics of table 45 would indicate, because the returns during those years were incomplete. The accounts given for the year 1789 are particularly incomplete in that they do not include the tonnage employed throughout the entire year. There was, however, a very substantial increase in the American tonnage employed in the foreign trade, and the growth continued rapidly, though irregu-

¹History of the People of the U. S., III, 225.

larly, after the European wars began. From 447,754 gross tons in 1793, when complete statistics were first recorded, it rapidly advanced to 1,089,876 tons in 1807. In 1789 only 23.6 per cent of the value of the foreign trade and 54.4 per cent of the volume of shipping were conducted in American ships; but by 1807 these proportions, indicating how practically all foreign vessels except those of England disappeared from American harbors, had risen to 92 and 92.7 per cent respectively. To the American of the present time, when 90 per cent of American foreign trade is conducted in foreign vessels, it seems incredible that the deep-sea tonnage of the American flag was greater in 1807 than it was in 1907, that the American marine engaged in the foreign trade in 1807 was three times as large as the coastwise marine; that over 90 per cent of the country's foreign trade was confined to American ships; and that America conducted a large share of the carrying trade of Europe. The maritime industry in Massachusetts, New York, Pennsylvania, and Maryland in 1807 had no precedent in the history of any nation; and before the war with England broke out in 1812, fourteen other States and Territories were represented in the tonnage register. Boston, New York City, Philadelphia, Baltimore, Charleston, Providence, and Portsmouth became famous for the large number of newly acquired sailing ships.

DECLINE OF FOREIGN TRADE AND SHIPPING, 1807 TO 1815.

The growth of foreign trade and shipping from 1790 to 1807 did not proceed uninterruptedly. American merchantmen until 1805 were exposed to attacks by the Barbary pirates. England had enacted countervailing duties and had closed her West India ports against American ships except at irregular intervals. France had begun to issue hostile decrees as early as May 1793, and England as early as June 1793, and under these decrees American vessels and merchandise were exposed to seizure. Indeed, had not Great Britain in 1795, under the Jay treaty, agreed to compensate American merchants to the extent of \$10,000,000 for property illegally condemned, war with England might have occurred long before 1812. The depredations upon American ships by the French after 1796 culminated in several naval engagements, which resulted in the commercial treaty of 1800.

After the renewal of the European wars in 1803, and after the expiration of the commercial sections of Jay's treaty, Great Britain revived the old neutrality rule of 1756, according to which neutrals in time of war could not carry on any trade which they did not ordinarily carry on in times of peace. In 1805, the seizure of American ships and cargoes by British and French men-of-war became a source of great loss to American merchants and ship-owners. The Secretary of State estimated that from 1803 to 1807 as many as 528 American ships were seized by England and 389 by France. But in spite of these interruptions, the foreign trade and shipping of the United States continued to grow, the crest of the tide not being reached until 1807.

When, in 1806, England extended her paper blockade so as to include all the European ports from the Elbe to Brest, Napoleon issued his famous Berlin decree declaring English ports in a state of blockade. England counterstroked in 1807 with the Orders in Council declaring a blockade against the ports of France and all her allies and forbidding neutral vessels to trade there except after calling at a British port, paying duties, and obtaining an English permit; and in answer to this the Milan decree of Napoleon made all vessels which traded in England and which recognized the British decrees subject to seizure by French men-of-war. It became the avowed purpose of Napoleon to bring England to terms by absolutely destroying her commerce, and to make this policy effective he refused to recognize the neutrality of any commercial power. From the Orders in Council of 1807 until the war of 1812, England seized 389 American ships; and from the Berlin and Milan decrees until 1812, 352 were seized by France, 70 by the Danes, and 47 by the Neapolitans.

Congress, on the advice of the President, sought a peaceful remedy, but the nature of the measures taken was such that the foreign trade continued to recede from its maximum of 1807. The first means of retaliation was a non-intercourse act which was never effective. This was followed on December 22, 1807, by an embargo on all ships in American ports, and the embargo was enforced by the American Navy. Imports fell from a value of \$138,500,000 in 1807 to \$56,990,000 in 1808; and exports fell from \$108,343,000 to \$22,430,000. So universal was the discontent which prevailed among American commercial interests that after a life of but fourteen months the embargo was replaced by a non-intercourse act applicable only to the trade with Great Britain and France. There was a slight recovery of trade, but, attacked by foreign enemies and hampered by non-intercourse restrictions, it remained in a depressed condition. War with England finally broke out in 1812, and the foreign trade continued to decline, until in 1814 it all but ceased. (See table 44.)

England had interfered with American trade by her Orders in Council, enforced by seizure and condemnation of vessels and cargoes; she had virtually blockaded American ports with her men-of-war; had impressed American seamen; and had apparently incited uprisings among the Western Indians. France and the allies of France had also attacked American commerce, but the grievances against England seemed the greater. The American people were willing to face a temporary suspension of trade in order to insure permanent future improvement. The desired effects of the war with England were not noticeable until the next commercial era, and there was no trade recovery until after December 24, 1814, when the envoys of both nations signed the Treaty of Ghent. Peace had meanwhile returned to Europe, thereby removing most of the reasons which had induced the United States to declare war on England and causing the commerce of the world to return once more to the channels in which it had flowed prior to 1793.

CHAPTER XXIV.

THE FOREIGN TRADE FROM THE TREATY OF GHENT TO THE CIVIL WAR.

The abnormal advance from 1815 to 1818, 31. Causes for the enlarged exports, 33. Reasons for the increase in imports, 35. Twelve years of trade recession, 1819-1830, 37. Causes of the stagnation in the export trade, 1819-1830, 38. Six years of improvement, 1831-1836, 41. Localities affected by growth in foreign trade, 43. A decade of irregular foreign trade, 1837-1846, 44. Fourteen years of buoyant foreign trade, 1847-1860, 46. Value of imports and exports, 1846-1860, 48. Destination of exports, 50. Revival of the foreign carrying trade, 51. Summary and conclusion, 51.

The forty-five years from the close of the second war with England to the outbreak of the Civil War were for the foreign trade of the United States a period of transition. The industries of the country were seeking a solid basis, its transportation problems were being solved, its commercial policy was being shaped. Meanwhile the foreign trade experienced great fluctuations. There were years of advance and recession, of buoyancy and dullness, but each advance reached a higher level than had previously been attained, and each depression was less severe than those preceding. The country was in every way becoming larger and its trade, domestic as well as foreign, rested on a gradually widening base. The export trade for the period 1836-1846, for instance, was relatively dull, but its lowest figure (\$84,346,000 in 1843) was not far below those for the years 1816 to 1818, when trade was active. An export trade of \$93,281,000, regarded as abnormally large in 1818, would, thirty-five years later, have been evidence of commercial stagnation, for in 1853 the shipments to foreign markets aggregated but little less than \$203,500,000.

The foreign trade from 1815 to 1860, taken as a whole, may be conveniently divided into the following periods, alternately of advance and reaction: (1) the abnormal advance from 1815 to 1818; (2) twelve years of trade recession (1819 to 1830); (3) six years of improvement (1831 to 1836); (4) a decade of irregular foreign trade (1837 to 1846); and (5) fourteen years of growth and expansion (1847 to 1860).

THE ABNORMAL ADVANCE FROM 1815 TO 1818.

The conflict with England, which began in 1812, had not proceeded far when the statesmen of both countries saw that it must soon run its course, inasmuch as the conditions which had led to the declaration of war had ceased to exist. Since the conflict between England and her European enemies had ended, there was no further need to question the neutrality rights of the United States, to seize and condemn American vessels and cargoes, to blockade American harbors with men-of-

war, nor to impress American seamen. The conclusion of the European wars, moreover, made it difficult for the United States to obtain all that was originally requested by the American peace envoys. Though at first insisting upon definite stipulations concerning the right of impressment, President Madison finally instructed the American negotiators that "on mature consideration it has been decided, that [in view of] all circumstances above alluded to, incident to a prosecution of the war, you may omit any stipulation on the subject of impressment, if found necessary to terminate it."¹

TABLE 46.—*Value of exports and imports of the United States, 1815 to 1818.*

Year.	Domestic exports.	Foreign exports.	Total exports.	Imports retained for consumption.	Total imports.
1814	\$6,782,000	\$145,000	\$6,927,000	\$12,820,000	\$12,965,000
1815	45,974,000	6,583,000	52,557,000	106,458,000	113,041,000
1816	64,782,000	17,138,000	81,920,000	129,964,000	147,103,000
1817	68,314,000	19,358,000	87,672,000	79,892,000	99,250,000
1818	73,854,000	19,427,000	93,281,000	102,323,000	121,750,000

The Treaty of Ghent contained no great commercial guarantees, either as regards impressment or otherwise. But though resulting in no definite treaty stipulations with respect to the important questions over which the conflict had been waged, the war nevertheless had certain permanent effects of extreme political and economic significance. First of all, it showed to the rest of the world that the United States was not only determined to insist upon her international rights, but was able to protect them. Secondly, the fact that for three years the country was shut off from the outside world and thrown upon its own resources worked a profound change in the character of domestic industry and trade, and at the same time brought the people to a sudden realization of the weakness of their former economic conditions. Internal (domestic) trade between the North and South, the East and West, became necessary in order that the people might live, and the lack of internal transportation facilities was impressed upon the public mind; while for the first time the extensive establishment of manufacturing industries became both requisite and, with foreign competition gone, readily possible.² The war afforded as complete protection to the infant industries of the country as did the high protective tariffs of later years.

Though the ultimate effects of the war with England were its wholesome influence upon the opinion of the European powers concerning the United States and its stimulus to American manufactures, the immediate effect of its termination was a temporary rise in the export and import trade.

From less than \$7,000,000 in 1814, the volume of American exports rose to over \$52,500,000 in 1815 and to \$93,281,000 in 1818. The

¹See Pitkin, *A Statistical View of the United States of America*, 406.²See vol. I, chap. xiii.

total volume of exports was less than during some of the years prior to the war, but the value of domestic exports, as distinct from the re-exports of foreign products, rose to a higher level than had ever before been attained, their highest previous point having been \$48,700,000 in 1807. The return of peace to Europe effectively destroyed the remarkable reexport trade which had enriched American merchants during the Napoleonic conflicts. European trade returned to its usual channels—it again became largely a direct trade between producing and consuming countries and was conducted mainly in European vessels.

The unusual activity in the exportation of domestic commodities, which began shortly after peace was declared, was due to various circumstances:

(1) It was largely due to the sudden sale of accumulated commodities. Shipments to foreign markets during the war with England had been infrequent, although production had continued. Great stores of surplus cotton, flour, grain, tobacco, rice, provisions, and lumber, the products of two harvests, had remained unmarketed. For months prior to the declaration of peace, the large ports of New York, Boston, Philadelphia, Baltimore, New Orleans, Savannah, and Charleston were the scenes of active preparation for the resumption of foreign trade and shipping. Vessels were repaired and loaded, and wharves were crowded with cargoes awaiting the opportunity to be shipped to Europe and the West Indies.

(2) Since England and the Continent had been largely deprived of American products during the war, there was clamor abroad for a resumption of trade. The cotton mills of England had suffered from a lack of raw cotton, and for a short time they afforded an abnormally large market for the American staple.

(3) It became manifest that the war had scarcely touched the resources of the country, but that it had revealed the economic possibilities of America. There was energetic activity in agriculture and domestic trade, and the return of peace was the beginning of a period of prosperity in all lines of business except in the manufacturing industries that had been established during the war. Unfortunately, however, men set themselves too rapid a pace and the excessive activity soon resulted in commercial and industrial disaster.

In those days news traveled slowly, and even after the war was officially ended the long-idle merchant ships were forced to wait until the vessel carrying the messages announcing the signing of the treaty made the voyage across the Atlantic. But as soon as it became known that peace had been declared and that the European, West Indian, and British trade could be resumed, every available American vessel cleared port. Domestic exports to England during 1818, when this trade was at its height, reached a value of nearly \$31,000,000, and those to France \$8,700,000. Indeed, the shipments of domestic commodities to Eng-

land and France were chiefly responsible for the unusual revival of the export trade. Germany, Holland, Spain, the West Indies, Portugal, South America, the East Indies, and China took greater quantities of American goods than during the war of 1812, but less than they had taken during the years 1793 to 1807.¹

It was mainly the agricultural products, which had been piled up at the ports during the war, that now found a market abroad. An aggregate of \$62,897,000 in value of farm products, chiefly cotton, flour and wheat, tobacco, rice, provisions, and Indian corn, were exported in 1818. One-half of the total (\$31,334,000) consisted of cotton, which had far outstripped flour and wheat (\$12,463,000) as an article of export. Exports of forest products were valued at nearly \$5,700,000 in 1818 and at nearly \$7,300,000 in 1816. Sea products valued at \$2,187,000 and manufactures valued at \$4,439,000 were shipped abroad in 1818.

The nature of the domestic exports and the decline of foreign re-exports caused striking changes in the relative positions in the export trade of the various States and seaports. New York still led, but its exports, foreign as well as domestic, were less than they had been during the European wars. All other North Atlantic States were now exceeded by Louisiana. Massachusetts was third, but only 37 per cent of the exports from Boston consisted of domestic products. Cotton exports placed South Carolina and Georgia respectively fourth and fifth, and then followed Pennsylvania, Maryland, and Virginia. The shipment of foreign goods reexported centered at the North Atlantic ports, while the rise of cotton exports and the partial occupation of the Mississippi Valley gave a surprising impetus to the shipment of domestic exports from New Orleans, Charleston, and Savannah.

The exports in 1818, as compiled by Pitkin, are shown in table 47.

TABLE 47.—*Value of exports from certain States, 1818.*

State.	Domestic exports.	Total exports.	State.	Domestic exports.	Total exports.
New York.....	\$12,982,000	\$17,872,000	Massachusetts..	\$5,698,000	\$11,988,000
Louisiana.....	12,176,000	12,924,000	Pennsylvania....	5,045,000	8,759,000
South Carolina...	11,184,000	11,440,000	Maryland.....	4,945,000	7,570,000
Georgia.....	10,977,000	11,132,000	Virginia.....	6,941,000	7,016,000

Coincident with the sudden rise in the exports of domestic products, there was an inrush of imports from England, and to a less extent from the Continent, India, and the West Indies. The value of all imported commodities soared from less than \$13,000,000 in 1814 to \$113,041,000 in 1815, \$147,103,000 in 1816, and \$121,750,000 in 1818. The value of

¹Evans, *Domestic Exports, 1789-1883*, pp. 78-95.

imported products retained for consumption likewise reached a maximum of nearly \$130,000,000 in 1816, and in 1818 was officially stated as \$102,323,000. (See table 46.) As compared with the export trade, the growth in imports was much larger. In 1816, when the influx of foreign goods was at its height, they exceeded the previous maximum annual value of imports by \$11,000,000 and were double the total exports of domestic commodities.

The reasons for the sudden increase of imports were much like those which caused the great expansion of domestic exports:

During the war, the merchants and manufacturers of England and Europe piled up cargoes of unmarketed goods, awaiting the resumption of the American trade. The merchants of England, in particular, were eager for the reopening of the American markets, because after the close of the European wars heavy restrictions were placed upon the importation of British goods into the continental countries.

For a time American merchants and consumers, even though domestic manufactures of many kinds were available, welcomed the arrival of foreign goods.

It was decidedly to the advantage of British manufacturers to crush the numerous manufacturing industries which had arisen in the United States during the war of 1812. As stated at the time by a member of Parliament, "it was well worth while to incur a loss upon the first exportation, in order by the glut, to stifle in the cradle, those rising manufactures in the United States, which the war had forced into existence, contrary to the natural course of things."

The British manufactures, which comprised the bulk of the imports, soon glutted the American market, to the serious detriment of the many industries which had not as yet been so firmly established as to withstand sharp competition. Before long, prices fell so low that from the eastern seaports to Cincinnati, Pittsburgh, and Nashville in the West, men were thrown out of work by the closing of factories.¹ Cotton, woolen, silk, flax, iron, lead, tin, brass, and copper manufactures, glass and earthen ware, haberdashery, hats, and other English goods were sold at low prices in auction sales; cheap India cottons came in large bulks; silks, cotton goods, wine, and brandy came from southern Europe and France; woolen, linen, iron, lead, and glass manufactures, spirits, cheese, and paints from northern Europe; sugar, rum and molasses from the West Indies.

The very magnitude of the import trade led to the adoption of measures to check it, *i. e.*, to the first concerted move for protection. The manufacturers of the Middle Atlantic and Central States were joined by the sugar and cotton interests of the South and the farmers of the West in a movement to curb the rising tide of importations by imposing a system of high duties on foreign products. The merchants and ship-

¹Fearson, *Sketch of America*, 417.

owners of New England, fearing its effect upon their foreign trade and shipping, opposed protection, but a tariff law was enacted in 1816, extending moderate protection to the cotton, woollen, and iron industries. The only effective provisions of this act were those against the low-priced India cottons, which were given a minimum valuation of 25 cents and were consequently obliged to pay an import duty two or three times that imposed by the former tariff laws. Aside from these provisions, the general rates were so low, and were so frequently circumvented by means of false sales and invoices,¹ that British manufactures continued to glut the American market. Even when a new tariff law was enacted in 1818 there was no effective protection. The continued influx of foreign goods, however, greatly strengthened the cause of protection.

Meanwhile, Congress was breaking down the old policy of protection to shipping which had been in force since 1789. By an act of 1815, the President was authorized to apply the policy of shipping reciprocity to the direct trade with any country granting equal privileges to American ships and cargoes. In July of that year a commercial treaty with England was concluded and the provisions of the treaty of 1794 regarding trade with British India were readopted. It was agreed that in the direct trade between Great Britain and the United States neither country should levy discriminating duties against the ships or commodities of the other, but that the West India trade might be regulated as either nation desired. The first of these provisions greatly injured the position in the carrying trade previously enjoyed by American vessels in the heavy direct trade with England, and the other provision was so interpreted as to cripple the American shipping and export trade with the British West Indies. Shipments of American flour, provisions, corn, rice, lumber, and live-stock to those islands were limited, and American vessels were debarred. English vessels secured the profits of a lucrative triangular trade in which they brought cargoes of English wares to the United States, carried thence American flour or lumber to the British West Indies, and then took cargoes of West India sugar, rum, and molasses back to the United States to exchange for American cotton, or proceeded to England with their cargoes from the West Indies.

The growth of both the import and export trade was abnormal and led to a commercial reaction. Even had there been no other disturbing influence, it is probable that the panic which began in October 1818 would have occurred; for in those days the dependence of the country upon foreign trade was far greater than it was after its own manufacturing industries, together with a large domestic market, had been developed. But other disturbing influences were effective. As the great excess of imports over exports was constantly draining specie out

¹McMaster, *History of the People of the U. S.*, IV, 341.

of the United States, large amounts of paper money were issued to replace it, and with the depreciation of this paper currency and the consequent inflation of prices, still more specie was driven out of the country. When in 1817 the evils of unwise paper issues became manifest, there was a reversal of policy, whereby the bank circulation was suddenly restricted to much smaller limits. However, the sudden contraction only disturbed matters still more. There was, moreover, a speculative mania which led to over-extension in all lines of business, except in the recently established manufacturing industries, which were ruined by the flood of foreign products. Finally, in the latter months of the year 1818, when the reaction came in foreign trade, a general business, banking, and currency panic ensued, and the active foreign commerce of the previous three years came to a sudden end.

TWELVE YEARS OF TRADE RECESSION, 1819 TO 1830.

A sharp decline in the foreign trade accompanied the panic of 1818-19, the effects of which lasted for a long time. Imports dropped from a value of \$121,750,000 in 1818 to \$87,125,000 in the following year, and exports of domestic products fell from \$73,854,000 to \$50,977,000 during the trade year. It was the beginning of twelve years of dull foreign commerce. In 1830 the imports were valued at less than \$71,000,000, the exports of domestic goods at \$59,462,000, and the total export trade at \$73,849,000. The reexport trade continued the downward tendency which began with the close of the European wars, so that the total export trade in 1830 had a smaller value than the domestic products which had been shipped abroad in 1818. The decline in value was partly due to the lower level of prices; but except in the cotton exports there was also a decrease in the volume of the foreign trade.

Dullness was especially pronounced in the import trade. While in 1815 the value of imports had exceeded the value of exports by \$60,000,000, the excess was now a small item; indeed, during four of the twelve years the exports were in excess of the imports. There was a slight increase in the imports received from Spain, Norway, and Sweden, the Hanse Towns, Manila, China, Brazil, and the Argentine, but France alone, of the commercial countries which shipped large quantities of foreign goods to America, continued to increase the volume of her shipments. The imports received from England, Holland, the West Indies, Russia, Portugal, and British India fell off; and those from the Dutch East Indies remained about stationary.

The import trade of every large Atlantic port except New York was depressed. The quantity of goods received at New York increased after 1825, when the Erie Canal provided a direct connection between that port and the Central West; but the improvement at New York did not end the general stagnation of the import trade of the country as a

whole. It merely shifted a still larger share of the trade to New York, increasing the dullness at Philadelphia, Boston, Baltimore, Charleston, and Savannah. The import trade at New Orleans and Mobile gradually increased, for those ports served a large new country which was without adequate eastern transportation connections. But the imports received at the Gulf ports were small as compared with the exports handled by them and small as compared with the imports received at New York, Boston, and Philadelphia. The decrease in trade occurred with respect to practically all the important articles imported—woolen and cotton goods, linen and silks, spirits, tea, lead, sugar, and molasses. There were but few imports which were not seriously retarded. In manufactures there was an increase in iron imports; wines, fruits, spices, and coffee were also more largely imported; and a few raw materials for the manufacturing industries, chiefly tropical cabinet woods, indigo, hides and skins, copper, tin, and brass were bought in slightly larger quantities.

TABLE 48.—*Value of exports and imports of the United States, 1819 to 1830.*¹

Year.	Exports domestic products.	Exports foreign products.	Total exports.	Imports.
1819	\$50,977,000	\$19,166,000	\$70,143,000	\$87,125,000
1822	49,874,000	22,286,000	72,160,000	83,242,000
1825	66,945,000	32,591,000	99,536,000	96,340,000
1827	58,922,000	23,403,000	82,325,000	88,509,000
1830	59,462,000	14,387,000	73,849,000	70,877,000

While the export trade in American commodities did not increase much during the years 1819 to 1830 and remained below the high level of 1818, it is significant that it consistently remained at a higher level than it had occupied prior to the war of 1812. Domestic exports to the East Indies, the Swedish and Danish West Indies, Cuba, and Spain continued as they had before the panic; those to France, Canada, Norway and Sweden, Italy, and Brazil increased slightly. The export trade suffered chiefly in England and the British West Indies. Shipments to the British West Indies almost ceased, and those to the Dutch, French, and Spanish West Indies (except Cuba), Holland, Russia, the Hanse Towns, Portugal, and China were far less than they had been either before or immediately after the conflict with England.

The dullness affected most of the great articles of export—flour and wheat, corn, tobacco, fish, lumber, naval stores, and provisions. There were but two important exceptions, cotton and manufactures. Cotton culture had by 1830 been extended throughout all the South Atlantic States; and the Gulf States (Alabama, Mississippi, and Louisiana), together with Tennessee, produced nearly one-half the entire crop. Of the increased crop, but 60,000,000 to 70,000,000 pounds were consumed in American mills. The foreign cotton market was far more important

¹Pitkin, *A Statistical View*, 35, 177.

than the domestic market, and cotton exports advanced from 87,000,000 pounds in 1819 to 298,000,000 in 1830. It was only because of the violent fall in prices that the value of these cotton exports grew but slightly.¹ The advance in exports of manufactures was due to an unusual increase in the output of cotton textiles, boots and shoes, soap, candles, hats, wood manufactures, and iron goods. The value of exported manufactures increased from \$2,000,000 in 1819 to nearly \$6,000,000 in 1830.²

The stagnation in the export trade was greatest in the Atlantic States, and nowhere else was trade crippled so severely as in Pennsylvania. A short time before, this State had led in the foreign trade, but in 1830 her exports were valued at only \$4,292,000, or less than those of any other important commercial State except Maryland. The depression in New England was only slightly less acute than in Pennsylvania. New York alone of all the Atlantic States increased the annual shipments to foreign markets, chiefly because the port of New York had after 1825 a direct canal route to the interior. In contrast with the reaction in the East, the foreign trade dependent upon the Mississippi River and the port of New Orleans slowly advanced. By 1830, New Orleans was second only to New York in the export trade; its exports were double those of Boston and more than treble those of Philadelphia. The trade of Mobile, dependent largely upon the Alabama River, was still relatively small, but was likewise gradually increasing.

The values of exports in 1819 and 1830 from certain States, as stated by Pitkin, were as follows:

TABLE 49.—Value of exports from certain States, 1819 and 1830.

	1819	1830		1819	1830
New York.....	\$13,587,000	\$19,698,000	Virginia.....	\$4,392,000	\$4,792,000
Louisiana.....	9,769,000	15,489,000	Pennsylvania....	6,294,000	4,292,000
South Carolina...	8,251,000	7,627,000	Maryland.....	5,926,000	3,791,000
Massachusetts...	11,399,000	7,213,000	Alabama.....		2,295,000
Georgia.....	6,310,000	5,337,000			

Though the violent depression of the foreign trade was due first to the panic of 1818-19, there were other reasons why foreign commerce remained in a continuous state of stagnation for a dozen years or more:

A larger domestic commerce developed. It is significant that the depression in general business and in the internal trade of the country was less severe; indeed, by the middle of the period from 1819 to 1830, many branches of internal commerce were in a flourishing condition.³ A determined effort was being made to develop home industries and a domestic market for the agricultural crops, and with these purposes in view the farmers of the West and the manufacturers of

¹Value of cotton exports: 1818, \$31,334,000; 1819, \$21,082,000; 1825, \$36,847,000; 1830, \$29,675,000.

²As compiled by Evans, *Domestic Exports, 1789-1883*, p. 70.

³See vol. I, chap. xiii, pp. 217-218.

the East and West united in favoring a policy of higher protection to American manufactures. New England and the South changed positions, the former embracing the cause of protection and the latter deserting it. The South had few industries to protect and few commodities which might depend on a home market, the bulk of its one great crop (cotton) being sold abroad and the greater portion of the many manufactured articles annually required being purchased abroad or in the North. Notwithstanding the opposition of the South, the manufacturers and the farmers carried out their program, and under the stimulating influence of the new policy industry quickly revived and the people became prosperous, while a notable domestic trade arose to compensate for the losses in foreign commerce. Professor McMaster writes that "it is useless to attempt a summary. It is sufficient to know that from Maine to Maryland and from Maryland to Missouri new industries of a hundred sorts were now pursued with untiring energy."¹ The growth of home industries tended to decrease both the import and export trade. Raw materials for manufacturing found a larger home market than formerly at American mills and factories, and the growth of industrial centers and city population provided a larger domestic market for American flour, wheat, corn, fish, and provisions.

The American protective tariff wall gradually being erected was a hindrance to the importation of foreign manufactures. That was the immediate purpose of the protective tariff acts of 1818, 1819, 1824, and 1828, each of which increased the rates of import duties.

England and most other powers of Europe were similarly enacting tariff laws which limited the foreign market for American exports. The English corn laws and continental tariffs were strictly enforced against American agricultural products and foodstuffs. Even the cotton export trade, which grew rapidly during these years, suffered not only from reduced prices, but from the British policy of discrimination in favor of cotton from British possessions, which was inaugurated in 1819.

Aside from the legislative restrictions, the European demand for American agricultural products and lumber had, since the return of peace in Europe, fallen back to a normal level. The great increase in exports to Europe during the European wars was by its very nature temporary, and the rebound after the war with England was but natural. Europe had now definitely returned to old trade channels, and with the return came a falling off in the demand for American products.

The lack of cheap and adequate transportation facilities between the interior and the seaports still remained a powerful obstacle to the ready movement of imports and exports. What the transportation

¹A *History of the People of the U. S.*, V. 230.

situation was during these years and how it was slowly being improved by the building of canals and turnpikes, the extensive use of flat-boats, and the introduction of river steamboats is described in connection with the account of the development of internal commerce.¹

SIX YEARS OF IMPROVEMENT, 1831 TO 1836.

After 1830 the trade situation became somewhat more favorable to an increase in imports and exports. In 1832 the tariff, although still left high enough to protect cotton, woolen, and iron manufactures, was in some respects reduced; and the compromise tariff act of the following year provided for a gradual reduction throughout the entire list of protected industries. The long-standing controversy with Great Britain over the West India trade was settled in 1830, British and American vessels thereafter engaging in this trade on terms of equality. The principle of shipping reciprocity, which had been applied to the direct trade with foreign countries in 1815, was in 1828 extended to the indirect trade as well. Reciprocal shipping arrangements were accordingly entered into with Norway and Sweden, Brazil, Martinique, and Guadeloupe in 1828; with Prussia in 1829; Great Britain and Canada in 1830; Austria-Hungary in 1831; Spain, Mexico, and Russia in 1832; Mecklenburg-Schwerin in 1834; and with Portugal, Madeira, Porto Santos, the Azores, Tuscany, and Venezuela in 1836. Many general commerce and navigation treaties were concluded during these six years and the years immediately preceding.²

The development of the agricultural industries of the Central States and the Southwest was gradually resulting in the production of a large annual surplus of farm products. Large quantities of pork and beef products, butter, flour, corn, whisky, and hemp were shipped down the Mississippi River, together with cargoes of staves, bagging and cordage, candles, and other rough manufactures. Simultaneously, growing quantities of western products were moving eastward by way of the Erie Canal route. The growth of cotton culture in the Southwest was of even greater importance to the foreign trade. The total crop grew from 979,000 bales in 1830 to 1,423,000 in 1837, and nearly the entire increase was in the new cotton States of the Southwest.³ Southern agriculture was becoming highly specialized, the one great crop being cotton. Specialization requires exchange of commodities, and at this time its chief influence was on the foreign trade, for although the northern cotton mills were heavy buyers, three-fourths of the total cotton crop was obliged to seek a foreign market. Fortunately, a stronger demand in England had arisen, both because of the rapid

¹See vol. I, chap. xiii, pp. 213, 220.

See *Treaties, Conventions, etc., Between the United States of America and Other Powers, 1776-1909*. Senate Doc. No. 357, 61 Cong., 2 sess.

³Hammond, *The Cotton Industry*, 72.

expansion of the British cotton-textile industry and of a decrease in the purchases of West India and Brazilian cotton.¹ The specialization in cotton culture required the South to purchase many commodities. A lucrative trade between the North and South sprang up, and the imports into the South from abroad were also largely increased.

Domestic and foreign trade were stimulated by improvements in the means of transportation. The Erie Canal, opened in 1825, was a pronounced success; the Ohio River, in 1832, was connected with Lake Erie by the Ohio Canal; over 300 steamboats and a large number of flatboats were navigating the Mississippi and other western rivers. Canals were opened between Lake Champlain and the Hudson River, between the Chesapeake and Delaware Bays, between the interior of Pennsylvania and the seaboard, and in many other sections of the country. By the end of this period, 12 States had contracted an aggregate canal debt of over \$60,000,000, and although some of the funds were unwisely spent, in many instances the new waterways were highly successful.

The advance which began in 1831 and ended in 1837 carried the foreign trade to a higher level than it had reached during the abnormal rise of the years 1815 to 1818. The exports of domestic merchandise rose from \$59,462,000 in 1830 to nearly \$107,000,000 in 1836, or to a point over \$33,000,000 in excess of the previous maximum of the year 1818. Though the re-exportation of foreign products was now of slight importance, the annual value of the entire export trade was \$20,000,000 in excess of what it had been in any year of the past history of American commerce.

TABLE 50.—*Value of exports and imports of the United States, 1830 to 1836.*

Year.	Domestic exports.	Foreign exports.	Total exports.	Imports.
1830	\$59,462,000	\$14,387,000	\$73,849,000	\$70,877,000
1831	61,277,000	20,033,000	81,310,000	103,191,000
1832	63,137,000	24,040,000	87,177,000	101,029,000
1833	70,317,000	19,823,000	90,140,000	108,118,000
1834	81,034,000	23,313,000	104,347,000	126,521,000
1835	101,189,000	20,505,000	121,694,000	149,896,000
1836	106,917,000	21,746,000	128,663,000	189,980,000

The increase in exports was general in all the North and South Atlantic States except Pennsylvania and Maryland. The general exports of New York and the cotton exports of Charleston and Savannah were unusually large. Relatively, even greater progress was made at the Gulf ports, and by 1834 the cotton of the Southwest, combined with the western commodities carried down the Mississippi River, made New Orleans the leading exporting city of the United

¹Hammond, *The Cotton Industry*, 248.

States. From a value of \$15,000,000 in 1830, the exports from Louisiana rose to \$37,000,000 in 1836, while the exports from New York in the latter year amounted in value to only \$29,000,000. The foreign shipments from Mobile during the same years advanced from \$2,295,000 to \$11,184,000, their value being greater than that of the exports of any Atlantic port except New York and Charleston.

The increase was not general as to all the exports of the country, but it included some of the leading articles of commerce. Unusual increases were made in tobacco and cotton exports, the value of the cotton rising from \$29,674,000 in 1830 to \$71,285,000. Smaller gains were made in the foreign shipments of flour, provisions, whale oil, naval stores, staves and lumber, and manufactures.

The nature of the articles which caused the enlarged exports confined the growth of trade mainly to the markets of England and northern Europe. Shipments to Great Britain increased from \$28,841,000 in 1831 to \$53,302,000 in 1836, and those to France rose from \$5,635,000 to \$19,608,000. Smaller but increasing quantities were shipped to Scotland, the Hanse Towns, Belgium, Russia, Norway and Sweden, Spain, and Denmark. The shipments to Italy and Portugal declined, and outside of northern Europe and Great Britain there was little increase in American exports except to Canada and the British West and East Indies. This was not an era of expanding trade in the newer markets of the world. The exports to China, to Manila, the Dutch East Indies, Mexico, and Central and South America, continued at their general level of the previous period, 1818 to 1830. The shipments to the Spanish, Dutch, and Danish West Indies likewise did not increase, and those to the French West Indies suffered a decline.

The growth in exports was accompanied by an even greater and more general increase in the import trade. Its value rose sharply from \$70,879,000 in 1830 to \$189,980,000 in 1836. The largest quantities of foreign goods came from Great Britain, France, and the countries of northern Europe, where the surplus cotton crop of the United States found a market. From all the countries in which the American export trade increased, as well as from China, Mexico, Cuba, Brazil, Peru, and Colombia, there came a growing volume of imports.

The expanding import trade centered mainly at the ports of the North Atlantic. At all the large North Atlantic ports, even at Philadelphia, where the export trade was inactive, the import trade gradually increased. Imports entering the State of New York grew in value from \$35,624,000 in 1830 to \$118,253,000 in 1836, comprising 62 per cent of the total imports of the entire country. From New York City, Boston, and Philadelphia the foreign goods were distributed throughout the United States. The imports moving directly to the South Atlantic ports from abroad also increased, but they were trivial in quantity and value as compared with their cotton exports. The

imports entering New Orleans, the leading export center, likewise advanced, but they were less than one-half the exports from that city and very much less than the import trade of either New York or Boston. Alabama, with an export trade valued at \$11,184,000, imported directly foreign goods valued at but \$651,000; while Pennsylvania, with exports of less than \$4,000,000, received imports valued at over \$15,000,000.

It does not follow that the Southern States consumed few imports. On the contrary, the business of the South being highly specialized, it was necessary to make heavy purchases from the North, of foreign as well as of domestic commodities. Instead of importing directly from abroad, the South was wont to receive many foreign goods indirectly from northern merchants. A well-known contemporary southern publisher and writer described as follows this indirect trade, which continued for many years:

"The fact is forced upon us, that the South, though furnishing the great aggregate of the exports of the country, has declined in the relative importance of its foreign commerce. . . . The question then presents itself, will the South be content with its present position? If a great centralization of capital at the North be the secret of its vast commerce, have not we to balance against it many other advantages? We are as near to Europe, nearer to the West Indies, to South America, to Mexico, and other important trading points. Thousands of shipping leave our ports with rich products annually, and they must return directly to us, in mere ballast, or take a circuitous course back by the way of New York or Boston. If there are any wares or merchandise to return, for our own consumption, for the cotton, tobacco, rice, sugar, or grain, sent by us to Europe, how natural and proper is it that these wares and merchandise should return *directly* here, without being saddled with the profits of intermediate hands. That the South should be *dependent* upon the North for its imports is inexplicable upon any sound principle of political economy, and evidences a state of things humiliating in the extreme. We do not want *capital*, but most sadly want *enterprise*, which God, we implore, will give to our children, should it so happen that we are irreclaimable and past all hope."¹

A DECADE OF IRREGULAR FOREIGN TRADE, 1837 TO 1846.

The buoyancy of foreign trade was of short duration. The business prosperity of the country again developed a speculative fever which resulted in another serious financial and industrial panic. Western land speculation, promoted by unsound banking, was the chief field of over-extended credit. The number of banks increased from 329 in 1829 to 788 in 1837, bank circulation from \$48,000,000 to \$149,000,000, and bank loans from \$137,000,000 to \$525,000,000. When, in July 1836, the famous specie circular was issued, the farmer as well as the land speculator was unable to meet his obligations, and many banks suspended. Land speculation, moreover, was supplemented by over-extension in other lines of business. The investment of public as well

¹DeBow, *The Industrial Resources of the Southern and Western States*, I, 330, 331.

as private funds in canals and other internal improvements went beyond the bounds of safety; private business of many kinds was generally over-extended; and the distribution of the Federal surplus increased the likelihood of reaction. Prices were raised to a speculative level, and as a climax to the unsound conditions prevailing, there was a crop failure in 1837.

The panic of 1837 was not the result of abnormal foreign trade, as the panic of 1818-19 to a large extent had been, but when the business reaction came, a setback in imports and exports occurred. In one year the value of the imports shrank nearly \$49,000,000, and that of the exports over \$11,000,000. It was several years before the effects of the panic were overcome, and even then there was nothing to stimulate the foreign trade. As is shown in table 51, the value of neither the import nor the export trade had at the end of a decade recovered the level occupied in 1836. The volume of the foreign trade, aside from cotton exports, remained almost stationary.

TABLE 51.—*Value of exports and imports of the United States, 1836 to 1846.*

Year.	Domestic exports.	Foreign exports.	Total exports.	Imports.
1836	\$106,917,000	\$21,746,000	\$128,663,000	\$189,980,000
1837	95,564,000	21,855,000	117,419,000	140,989,000
1840	113,896,000	18,190,000	132,086,000	107,142,000
1845	99,300,000	15,347,000	114,647,000	117,255,000
1846	102,142,000	11,347,000	113,489,000	121,692,000

Aside from the increase in cotton culture, no positive forces to encourage the growth of foreign trade appeared until a full decade had elapsed. Though further improvement in the facilities for internal transportation was essential in order that western farm produce might move at lower cost, the canal policy was almost abandoned after the panic, and railroad construction was inactive until after 1846. The country was afflicted with a money stringency which retarded business investment. Public opinion once more favored a protective tariff, and the compromise act of 1833 was in 1842 replaced by a law imposing higher import duties, the immediate results of which were to reduce still further the import trade and create a larger home market for American commodities.

Aside from the expansion of the cotton crop, there was no marked increase in production during this decade, and consequently no need for an enlarged foreign market. The cotton planters, however, whose crop increased from 1,361,000 bales in 1836 to 2,100,000 in 1846 and 2,395,000 in the previous season, were sorely in need of markets. Though the value of the cotton exports declined from \$71,284,000 in 1836 to \$42,767,000 in 1846, their volume grew from 424,000,000 to 547,000,000 pounds. In 1845, as many as 873,000,000 pounds of cotton

were shipped abroad, but the value of these exports was less than \$52,000,000. In the cotton trade, as distinct from other branches of the foreign trade, the dullness was due not to a decreased volume of foreign shipments, but to the low prices received for them.

The foreign trade as a whole was irregular, but neither gained nor lost any considerable ground. In value it declined; in aggregate volume it rose somewhat. The aggregate gross vessel tonnage entered and cleared in the foreign trade of the United States grew from 3,295,000 tons in 1836 to 6,300,000 in 1846. The value of the trade with the British West Indies, Canada, Russia, the Hanse Towns, Italy, and China continued slowly to increase. That with the leading European markets—Great Britain and France—underwent a heavy decline, as also did the trade with Scotland, Denmark, the East Indies, the Dutch and Danish West Indies, Argentina, and Colombia. The Mexican trade declined abruptly, for Mexico and the United States were preparing for the war which began in 1846. The trade with the remaining portions of the commercial world barely maintained the level which it had attained during the years 1831 to 1836.

FOURTEEN YEARS OF BUOYANT FOREIGN TRADE, 1847 TO 1860.

After 1846 a series of events occurred which resulted in the rise of the foreign trade to a new high level.

(1) An event of far-reaching importance was the discovery of gold in California in 1848. When the news of the discovery reached the Middle West and East, thousands of gold-hunters migrated in caravans across the plains and mountains, in sailing clippers around Cape Horn, and in steamers to and beyond Nicaragua and Panama. The Panama Railroad, which began operation in 1855, greatly increased the use of the Panama route. In 1851 gold was discovered in Australia, and in 1859 a gold stampede to Colorado began. The combined product of all the newly discovered gold mines increased the specie of the world sufficiently to raise the prices of commodities, to act as a powerful stimulus to production, and to enlarge the purchasing demand in this and other countries. For the time being, the money stringency, which had acted as a hindrance to production and commerce, was removed, and the country experienced an era of exceptional business prosperity.

(2) Another cause of great influence was the rapid construction of railroads. Stimulated by the abundance of money, by general business prosperity, by the opening of the West, by public-land grants, stock subscriptions, and other forms of public aid,¹ and by the eagerness of the investing and speculative public to purchase securities, railroad construction advanced at a rapid rate and the railroad mileage of the country rose from 9,021 miles in 1850 to 30,635 in 1860. Not only were the leading trade centers of the East joined by rail, but most

¹Johnson, *American Railway Transportation*, chaps. iii and xxii.

of the large eastern trunk lines were completed, and for the first time the Mississippi Valley was effectively connected with the Atlantic seaboard.¹ Although construction was less active in the South, a group of railroads was built to connect the South Atlantic ports with the interior, and another group extended northward from the Gulf ports. Effective means of communication were simultaneously established. The postal system was rapidly extended, and by 1860 most of the large cities were connected by a telegraph system aggregating 50,000 miles of line.

(3) The rapid opening of the Mississippi Valley was of primary importance to the foreign trade. The westward migration and the land speculation of earlier years were now resulting in the rapid development of agricultural resources. In 1838 Chicago, a small fur-trading station, made its first shipment of wheat, amounting to 78 bushels. No other grain, no flour, or provisions were then shipped from the future metropolis of the West, but in 1860 Chicago shipped 698,000 barrels of flour, 13,700,000 bushels of corn, and 12,402,000 bushels of wheat. Illinois, Indiana, Ohio, and Wisconsin outranked Pennsylvania and New York as grain-producing States, and promising beginnings were made in Michigan, in the trans-Mississippi States of Iowa, Missouri, and Minnesota, and in California and Oregon. The live-stock and provision trade still centered mainly at Cincinnati and Louisville, but it had spread westward through Indiana, Illinois, and Missouri; and Chicago, Indianapolis, and St. Louis became shipping and packing centers. In 1850 Kentucky and Tennessee were the leading hog-raising States, but by 1860 they were superseded by Indiana, Illinois, and Missouri.

(4) The relatively prosperous decade and a half that preceded 1860 was an era of rapidly increasing agricultural production, compelling producers to seek foreign as well as home markets. The cotton crop, which even before 1846 had been so large as to embarrass the southern planters with declining prices, grew from 1,424,000 bales in 1837 to 3,841,000 in 1860. The wheat crop rose from 84,823,000 bushels in 1840 to 173,105,000 in 1860; the corn crop from 377,532,000 to 838,793,000 bushels; the number of hogs from 26,000,000 to 33,500,000; the number of beef cattle from 15,000,000 to nearly 25,500,000; and the tobacco crop grew from 219,000,000 to 434,000,000 pounds.

The manufacturing industries also increased their output. In 1860 the cotton mills consumed 423,000,000 pounds of cotton as compared with 126,000,000 in 1840; and during the same period the output of the woolen mills advanced from a value of \$20,700,000 to \$73,454,000. The official value of all the manufactures produced in the United States rose from \$1,000,000,000 in 1850 to \$1,886,000,000 in 1860. But the growth in home industries did not increase the domestic market suffi-

¹See vol. I, chap. xiv, pp. 237-241.

ciently to counterbalance the rapid growth of the agricultural crops. Neither did it prevent a marked increase in the imports from foreign countries.

(5) It was fortunate that the foreign demand for American farm products grew rapidly during these years of increasing production. One of the greatest obstacles to the foreign trade in grain, flour, and provisions had been the corn laws of Great Britain. These were in 1846 superseded by a system of gradually declining import duties which, in 1849, reached a free-trade basis, thereby opening Great Britain to American foodstuffs under favorable conditions. Just as the tariff barriers were being removed, Ireland suffered a severe food famine and was obliged to import breadstuffs from abroad.

TABLE 52.—*Value of exports and imports of the United States, 1846 to 1860.*

Year.	Domestic exports.	Foreign exports.	Total exports.	Imports.
1846	\$102,142,000	\$11,347,000	\$113,489,000	\$121,692,000
1847	150,311,000	8,338,000	158,649,000	146,546,000
1850	136,947,000	14,952,000	151,899,000	178,138,000
1855	246,709,000	28,448,000	275,157,000	261,469,000
1858	293,758,000	30,886,000	324,644,000	282,613,000
1859	335,894,000	20,895,000	356,789,000	338,768,000
1860	373,189,000	26,933,000	400,122,000	362,166,000

In 1854, moreover, the agents of the United States and Canada negotiated a reciprocity treaty which went into effect in the following year. This treaty provided for reciprocal freedom of trade in the chief agricultural and raw products of both countries, and the mutually free markets for these commodities increased to some extent both the export and import trade. The effect in the United States, however, was chiefly upon imports, for nearly all the articles included in the treaty, except rice, cotton, naval stores, and tobacco, were those of which Canada had a surplus. American manufactures, not being included in the treaty, were barred from Canadian markets by gradually increasing tariffs.

(6) While the export trade was encouraged by the adoption of the free-trade policy in Great Britain, public sentiment in the United States was once more swinging in favor of reduced import duties. In 1846 the protective-tariff policy of the United States was modified by the Walker act, and in 1857 a still further reduction in the tariff rates was made. The moderated duties remained in force until the Civil War, and opened the door to foreign iron and other metals, to manufactures of iron, wool, cotton, leather, glass, paper, wood, wool, and sugar.

Stimulated by the various events mentioned above, the foreign trade increased with great rapidity. The value of all exported commodities

rose from \$113,489,000 in 1846 to over \$158,649,000 in the following year, and to over \$400,000,000 in 1860. The exports of domestic products advanced from a value of over \$102,000,000 in 1846 to \$373,189,000 in 1860, and during the same period the value of the import trade increased from \$121,692,000 to over \$362,000,000. The panic of 1857 caused a temporary decline, but within less than a year after the crisis there was a full recovery and both imports and exports steadily advanced.

The export trade was especially buoyant. Although exports had occasionally exceeded imports in the past, it was during this period that the favorable balance of exports became a feature of American commerce. With the single exception of rice, the increase in the exports of the leading agricultural commodities was general. Even had there been no progress in the shipment of farm products other than cotton, the export trade would have moved to a higher level, for cotton exports increased from 1,667,000 bales in 1846 to the unprecedented total of 3,774,000 in 1860, from a value of \$42,767,000 to \$191,806,000. Now, however, for the first time, western grain and provisions became items of real importance in the foreign trade. It has been aptly stated that "one may perhaps date the creation of a world market for grain from the year 1846, when Great Britain became a large importer."¹ In 1860, the United States exported 4,155,000 bushels of wheat and 3,314,000 of corn, 2,612,000 barrels of wheat flour, and provisions valued at \$16,612,000. In 1840, the total exports of foodstuffs had been valued at \$20,500,000, but their value in 1860 had risen to \$50,791,000. A few years earlier, in 1857, when the grain crop was large and the home demand temporarily at low ebb, 14,570,000 bushels of wheat, 7,505,000 bushels of corn, and 3,712,000 barrels of wheat flour had been shipped to foreign markets. In that year the exports of breadstuffs alone were valued at over \$55,500,000.

The foreign trade in forest products also increased. In 1853, lumber exports had been valued at \$2,832,000, but during the following year they suddenly rose to \$5,419,000, and by 1860 they had reached a value of \$6,414,000. The exports of leaf tobacco advanced from \$8,478,000 in 1846 to nearly \$16,000,000 in 1860 and in 1857 aggregated \$20,610,000. Substantial gains were made in the shipment of manufactured goods. In 1860 the exports of cotton goods were valued at \$10,935,000, iron products at \$5,870,000, wood manufactures at \$10,048,000, and a promising beginning had been made in the foreign shipment of tobacco manufactures, leather goods, chemicals, vehicles, and copper manufactures. The total exports of manufactures rose from \$15,425,000 in 1840 to \$23,223,000 in 1850, and \$48,453,000 in 1860.²

¹*Monthly Summary of Commerce and Finance, January 1900*, p. 1998.

²As compiled by the Bureau of Statistics, Department of Commerce and Labor, *Exports of Manufactures from the United States and their Distribution, 1800 to 1906*, p. 28.

The foreign trade in naval stores, which had long lost its prominent position, increased in value from less than \$1,000,000 to nearly \$4,000,000. Exports of fish and whale products likewise advanced slightly, but the once controlling position of the fisheries in the foreign trade was permanently taken by the cotton of the South, the grain-fields and packing-plants of the West, and the factories of the East.

The export trade flowed in growing volumes to nearly all the great markets of the world. England afforded a large foreign market for cotton, flour, wheat, corn, and provisions. In 1846, American exports to England were valued at \$42,781,000, and by 1860 they reached a total of over \$187,000,000. The exports to France rose to over \$59,000,000. In Ireland and Scotland, in Bremen, Hamburg, Holland, Russia, Norway and Sweden, and even in Spain and Italy, the market for American agricultural exports increased. In no part of commercial Europe did the American trade fail to grow except in Denmark, Austria, and Belgium. Many other parts of the world bought, in constantly increasing quantities, the products of the United States. The reciprocity treaty with Canada and the treaty of peace with Mexico opened the markets of the nearest neighbors of the nation, while Commodore Perry's famous visit to Japan and the treaty with China following the British-Chinese opium war secured the free admission of American vessels and products to various ports of the two great nations of the Far East; the "sugar-trade period" of the Hawaiian Islands began in 1853, and the discovery of gold in Australia in 1851 soon created in that continent a market for American foodstuffs and mining machinery. Larger markets were found in Brazil, Argentina, Chile, and Peru, in Cuba and the British West Indies, in the British East Indies, and in Africa. In fact, with but one important exception there was a constant expansion of the export trade to all markets. The exception was the West Indies. In Cuba and the British islands alone was there an increasing trade, the shipments to Haiti, the Dutch, French, and Danish islands either remaining about the same or declining to a lower level.

The development of the import trade was in a somewhat different direction. While 77.5 per cent of the export trade centered in the Old World markets, less than 60 per cent of the imports came from European countries. The excess of exports over imports, which had come to be a regular feature of the foreign trade of the United States during this prosperous era, was due almost entirely to the favorable balance which appeared in the European trade. The import trade with England and all the north European countries, except Denmark, Russia, and Norway and Sweden, gradually increased, but in no case, except in the trade with Germany, did the imports increase as rapidly as exports, and the imports from the countries south of France actually declined in volume. Except in the case of the trade with Australia and Africa, in which the imports and exports were practically

equal, the import trade with non-European countries increased at a more rapid rate and was larger than the export trade. The imports from South America rose from \$16,647,000 in 1850 to nearly \$36,000,000 in 1860; those from foreign North America during the same decade grew from \$24,136,000 to over \$75,000,000; those from the Orient advanced from \$10,315,000 to \$26,202,000. Aside from the imports of rough Canadian lumber after 1854, there were no marked changes in the nature of the commodities imported. The relative proportion of tropical and subtropical foods and of raw materials for use in American industries increased to some extent, and that of manufactures declined, but in 1860 over 57 per cent of the imports still consisted of foreign manufactures.

One of the notable features of the growth in the foreign commerce of the nation during these fourteen years was the revival of the foreign carrying trade. Nothing serves better to show the increase in the volume of the foreign commerce than the fact that the aggregate vessel entrances and clearances rose from 6,300,000 gross tons in 1846 to 17,067,000 in 1860. Of the entrances and clearances in 1860, 71 per cent was made by American vessels, and 66.5 per cent of the value of the total foreign trade for the year was carried in American bottoms. The relative proportion carried in American ships was less than it had been in the past, but nevertheless the American vessel tonnage engaged in the foreign trade reached the highest point in its entire history. During the three decades following the war of 1812, American shipping, suffering from the reverses caused by the loss of the European carrying trade after the close of the Napoleonic wars, the substitution of shipping reciprocity for shipping protection under the acts of 1815 and 1828, and the many years of unsteady foreign trade, did not prosper greatly, and in 1846 the total burden of vessels engaged in foreign trade amounted to only 943,000 tons, which was less than the tonnage owned in 1810. After 1846, however, the gross tonnage of the ocean fleet rapidly increased, reaching the unprecedented total of 2,379,000 tons in 1860. In the following year it aggregated 2,496,000 tons—the highest point in the history of American shipping.

SUMMARY AND CONCLUSION

The foreign commerce of the United States had a remarkable growth during the forty-five years prior to the Civil War. The nation saw its exports rise from \$52,558,000 in 1815 to over \$400,000,000 in 1860; its imports from \$113,041,000 to over \$362,000,000; its deep-sea entrances and clearances from 1,735,000¹ to 17,000,000 tons. The gross tonnage of its ocean fleet rose from 854,000 to 2,379,000 tons. Though the course of this development was rendered irregular on account of the recurring years of depression and stagnation, the period

¹Year 1821; official data for previous years not available.

as a whole was nevertheless one of great expansion, and in the general prosperity which marked the closing years the foreign trade reached the highest stage of development ever attained up to that time.

During these years of prosperous growth the general character of the foreign commerce was in many respects considerably altered. First of all, there was a permanent relative decline in the volume of foreign re-exports. The yearly re-exportation of foreign commodities, which had been such a prominent feature of the American over-sea trade during the Napoleonic wars, dwindled away, and domestic commodities, the products of the farms, forests, and factories of the United States, made up most of the cargoes for the export trade. The constant growth in the exportation of domestic products brought about, as another noteworthy change, a great rise in the importance of exports as compared to imports. Though the import trade was, throughout the greatest part of the period, of larger value than the export trade, the steady development of the manufacturing and agricultural industries of the United States and the altered commercial policy eventually created conditions which produced an excess of exports. Radical changes occurred in the nature of the domestic exports. Though the leaf-tobacco crop increased in volume, the increase was not so much in Maryland and Virginia as in the Middle West, and the relative importance of tobacco as an export was permanently lost. Exports of fish and naval stores likewise increased to some extent, but relatively they occupied an unimportant position in the total foreign trade. Indigo exports all but disappeared, and the fur and rice trades declined to insignificance. The place of these long-standing exports was taken by new products. Throughout this entire period cotton was the undisputed king of exports; western flour, wheat, corn, and provisions gradually became important items; the foreign lumber trade, which had been light for many years, revived during the fifties, when the lumber industry moved into new regions; and gradually some of the factories and mills which were fostered by congressional aid sought foreign as well as domestic markets. These changes were the inevitable consequence of the fundamental industrial transition which was slowly taking place. The South turned from tobacco, naval stores, indigo, and rice to cotton; the North from fishing and the fur trade to agriculture and manufacturing. The vast farming resources of the Mississippi Valley were tapped, and improved transportation facilities connected this western empire with the large seaports to the east and south.

In addition to the marked alteration in the volume of the foreign trade, there was a great change in its geographical bases. The country itself grew in area. Florida was added to the national domain in 1819, Texas in 1845, the Oregon country in 1846, California and the region between Texas and the Pacific in 1848 and 1853, and with the acquisition of this immense territory the export trade ceased to be confined to

the Atlantic States from North Carolina to New England. Texas and California in 1860 had a greater export trade than Pennsylvania or Virginia; New Orleans during various years exported greater quantities of domestic products than New York; and the exports of Alabama also exceeded those of every Atlantic State except New York. The import trade confined itself more nearly to its old-established channels. The South did much of its importing indirectly through the ports of the North Atlantic. In 1860 New York handled 70 per cent of the entire import trade of the country, an aggregate of \$248,000,000. Massachusetts was second with imports valued at \$41,000,000, and Louisiana third, with less than \$23,000,000.

As the foreign trade grew larger, it gradually lost much of its adventurous character. Instead of being obliged to develop a speculative and hazardous trade in far-off, unknown lands, most of the exporters were able to turn their attention chiefly to the possibilities of trade with Europe. The markets in the Orient, South America, Canada, and Australia became larger, but the bulk of the cotton, grain, flour, and provision exports could most readily be sold in Europe. The old markets of the West Indies, which had been the mainstay of the New England and middle colonies, gradually declined, relatively and actually. During these years, as before, China, Manila, the East Indies, Africa, Brazil, and the newer regions of the world offered opportunities to the importer rather than to the exporter.

A great change took place in the relative positions of the domestic and foreign commerce. Great as was the growth of foreign trade, the internal commerce grew more rapidly, and before 1860 it had far surpassed in volume the commerce with foreign nations. During the period from 1815 to 1860 the "American system" arose in response to the demand for home manufactures and home markets for agricultural crops. A large number of populous industrial and commercial cities grew up to provide a domestic market for the agricultural, sea, and forest products of the country. A sectional specialization of industry led to an ever-increasing volume of exchanges among the various parts of the Union, and American producers, with the exception of the cotton planters, were freed in a large measure from the dependence upon a foreign market, which had characterized their economic condition of former years.

CHAPTER XXV.

CHANGES EFFECTED BY THE CIVIL WAR.

Effects of the war upon export trade, 54. Trade of the blockade-runners, 57. Foreign trade in cotton, 58. The war and the import trade, 58. After-effects of the Civil War upon industry, 59; commerce of the South, 60; shipping, 61, and import duties, 62. The Civil War an epochal period in the history of the foreign commerce, 63.

Throughout the period from 1830 to 1860, when both foreign and internal commerce were expanding and the country as a whole was prosperous, there was discontent in the South. Having few products at that time to sell in the domestic market and few manufacturing industries to protect, and producing large quantities of cotton to sell in foreign markets, and having to purchase many wares abroad or in the North, the Southern States were hostile to the protective tariff. With heavy investments in slaves and with agricultural industries based upon slave labor, they bitterly resented the growth of the anti-slavery sentiment in the North. To the people of the Southern States, the interests of the North and South appeared to be wholly apart.

As might have been expected, the secession of the Southern States occasioned a temporary panic among the business houses of the entire country. The wonder is that the business of the Northern States recovered so soon. The foreign as well as the domestic trade of the South was almost completely demolished by the invading armies and the blockading men-of-war; but in the North the domestic trade soon recovered from the first shock and the foreign trade became unusually active.

EFFECT OF THE WAR UPON EXPORT TRADE.

The recorded export trade of the country as a whole, as is shown in table 53, fell from over \$400,000,000 in 1860 to \$227,558,000 in 1862, but this decline was due quite largely to the almost complete absence of southern cotton exports. It is no less than remarkable that the official exports of the country, aside from cotton, actually increased in value from \$208,315,000 in 1860 to \$215,294,000 in the following year, and to \$261,469,000 in 1863. The North Atlantic ports were busier than they had ever been in their entire previous history, for various events directed an unusual volume of surplus goods in their direction.

(1) The agricultural crops of the North, instead of declining when great armies of men left the farms in answer to the call of President Lincoln, were very greatly increased. Women worked in the fields, farm machinery was rapidly introduced, immigrants came from abroad, thousands of families migrated northward from the border

States, and cheap lands were offered by the Federal Government, the railroads, and the States. The wheat crop of every war year exceeded the record crop of 1859, and the principal western wheat States doubled their output. The corn crop of the country as a whole declined somewhat, but in the Western States it, too, increased.¹ While only the usual number of hogs were raised, the number put on the market was larger than ever before and the number packed was almost doubled.

TABLE 53.—Recorded exports and imports of the United States during the Civil War.

Year.	Exports of merchandise.	Exports of merchandise and specie.	Exports other than cotton.	Imports of merchandise.	Imports of merchandise and specie.	Excess of exports.
1860	\$333,576,000	\$400,122,000	¹ \$208,315,000	\$353,616,000	\$362,166,000	\$37,956,000
1861	219,554,000	249,345,000	215,294,000	289,311,000	335,650,000	¹ 86,305,000
1862	190,670,000	227,558,000	226,378,000	189,357,000	205,772,000	21,786,000
1863	203,964,000	268,121,000	261,469,000	243,336,000	252,920,000	15,201,000
1864	158,838,000	264,235,000	254,339,000	316,447,000	329,563,000	² 65,328,000
1865	166,029,000	233,673,000	226,837,000	238,746,000	248,556,000	² 14,883,000

¹Cotton exports accepted as given in Evans, *Domestic Exports, 1789-1883*, p. 126.

²Excess of imports.

TABLE 54.—Tonnage of entrances and clearances and percentage American and foreign vessels during the Civil War.

Year.	Entrances and clearances.	Percentage of tonnage American.	Percentage of trade in American vessels.
	<i>Gross tons.</i>		
1860.....	17,065,000	71	66.5
1861.....	14,393,000	70	65.2
1862.....	14,702,000	69	50.0
1863.....	14,766,000	62	41.4
1864.....	13,370,000	46	27.5
1865.....	12,781,000	47	27.7

(2) Protected by heavy war tariffs, practically all the manufacturing industries of the North rapidly increased their output. There were but two important exceptions—the cotton mills and the whisky distilleries. The former, being unable to obtain sufficient raw cotton, were temporarily displaced by woolen mills, and the latter, suffering from the heavy excise taxes on whisky, were partly replaced by an increasing number of breweries. The flour, meat-packing, woolen-textile, sugar-refining, lumber, leather, and iron industries, after the first shock of the war panic, continued to enjoy the prosperity which had begun before the war. The petroleum industry, which began in 1859, continued throughout the war; even the shipments of whale oil to foreign markets made progress until the *Shenandoah* went on its voyage of destruction among the defenseless North Pacific whaling-ships.

¹Fite, *Social and Industrial Conditions in the North During the Civil War*, 2.

(3) A larger share of the increased agricultural crops and of the output of manufactures sought foreign markets because the home demand was inadequate. The trade between the North and South was almost completely stopped and the requirements of the East and West were too small to absorb the total supply.

(4) Fortunately, a heavy demand for American foodstuffs arose in European countries. The crops of England were a failure in 1860, 1861, and 1862, and Russia, Prussia, and France, which, with the United States, were the usual granaries of Great Britain, were unable to respond with increased shipments. The British Government, the friend of the South, was reluctant to admit that northern grain as well as southern cotton were of vital importance to the economic welfare of Great Britain; yet the need of American wheat and flour, if it did not prevent the recognition of the Confederacy by Great Britain, at least contributed to that result.¹

(5) The brunt of the war was borne by the South. The Mississippi River route to the Gulf of Mexico was for long periods of time practically closed to navigation, and this compelled the agricultural exports of the West to be marketed in the East and exported through the North Atlantic ports. The east-and-west trunk-line railroads carried a large tonnage of farm products; the lake route from Chicago and Milwaukee to the East became an established avenue for grain exports, and the Erie Canal as usual competed for a share of the western tonnage. The exports of every North Atlantic State from Maine to Maryland were greater in volume and in value during the war than they had been in 1860.

The increased exports included practically all products of western agriculture. During the years 1860 to 1862, wheat exports rose rapidly from 4,155,000 to 37,290,000 bushels, corn from 3,314,000 to nearly 19,000,000 bushels, and wheat flour from 2,612,000 to 4,882,000 barrels. During 1864 and 1865 the foreign shipments were somewhat less than in 1862, but they remained in excess of what they had been prior to the outbreak of the war. Increased quantities of bacon and hams, lard, tallow, pork, cheese, butter, soap, iron manufactures, boots and shoes, and whale oil were likewise shipped to foreign markets.

The growing agricultural exports went chiefly to the food-importing centers of the Old World—England, Hamburg, Bremen, Holland, and Belgium. But the exports to Canada, the West Indies, South America, Africa, Australia, China, and the East Indies continued to increase, none of them losing ground. These non-European countries, not being purchasers of cotton, were not so vitally affected by the blockade of southern ports. The only important markets in which American trade fell abruptly and remained at low ebb until peace returned were the grain-producing countries of Europe—France, Austria, Hungary,

¹Fite, *Social and Industrial Conditions in the North During the Civil War*, 19.

Italy, Russia, Prussia, Norway and Sweden, and Spain. When the cotton trade with England was suspended, the grain trade largely took its place; but unfortunately the nations of continental Europe were not importers of grain and they did not increase their imports of other American products.

Few exports from northern ports were adversely affected by the war. The exports of cotton and cotton goods, of course, suffered as a direct result of the conflict. Practically all of the enlarged output of woolen goods was needed to clothe the northern armies; the exports of naval stores and rice were less than they had formerly been, because these products came chiefly from the Southern States; and the exportation of live-stock declined, because the practice of shipping packed meats developed. The exports of tobacco and tobacco manufactures, pig-iron, lumber, cars and carriages, bread, and biscuit, while they did not increase, maintained the level which they had reached during the period between 1847 and 1860.

It was chiefly those branches of the foreign trade dependent on cotton that suffered during the war. Little cotton except that which escaped the watchfulness of the Federal blockading fleet was exported after 1861. Blockade-running is pictured as follows by James Kendall Hosmer:

"Privateering, which in 1861 Jefferson Davis sought to encourage by the issue of letters of marque, did not prove profitable, as private ships found better profit in blockade-running. Soon ordinary craft gave way to vessels built especially for this purpose. Cargoes shipped from Europe were transferred at the Bermudas or Nassau to long, narrow vessels, in which everything was sacrificed to speed; gray in color, these veritable ocean greyhounds could not at the distance of a few hundred yards be distinguished in the shadows against the sea, the horizon mist, or the sandy shore. Creeping stealthily landward, they dashed by night at full speed through the blockading lines, the breakers on the bar making the engines inaudible, the swiftness of the almost invisible apparitions baffling the keenest vision. . . . The ingoing cargoes brought huge profits; and the cotton, laden with which the blockade-runners came out, was better than a gold mine. It was no uncommon thing to clear \$150,000 each way. With such gains possible, blockade-running was profitable even though the vessel made only a trip or two before capture."¹

Yet, skillful and venturesome as the southern blockade-runners were, relatively little cotton reached the mills of England and Europe after 1861; and southern statesmen were in hopes that the dearth of cotton would cause England to intervene in favor of the South. To tide over the threatened war period, 3,794,000 bales had been exported in 1860, and much of the crop of 1861 was likewise hurriedly shipped away before an effective blockade was established. In October 1861, however, many British mills began to run on short time, largely because they had temporarily overstocked their markets, and soon thereafter

¹Hosmer, *Outcome of the Civil War*, 165, 166.

many of them were in difficulty, because the cessation of American cotton exports resulted in a "cotton famine."¹ The receipts of American cotton at British ports, as reported abroad, fell from 1,841,600 bales in 1861 to 71,766 in 1862, to 131,900 in 1863, to 197,800 in 1864, and to 462,000 in 1865. The receipts at continental European ports fell from 971,000 bales in 1860 to about 60,000 in 1862, 36,000 in 1863, 43,000 in 1864, and 68,000 in 1865.

The temporary glut of the British market in 1860 and 1861 and later the cessation of cotton imports from the South resulted in great hardship among the British operatives. In 1862, 165,600 Lancashire operatives were working short time, 247,230 were idle, and 485,000 people, or over 24 per cent of the inhabitants, were dependent upon public relief.² On the Continent, the plight of the mill-workers was less severe, for the cotton industry was less centralized, and the slower spindles were more easily adapted to India cotton; but there, too, the cotton trade was in a serious condition.³

An attempt was made to substitute for the American staple cotton from other countries. The total cotton imports of Great Britain declined from over 3,000,000 bales in 1861 to less than 1,500,000 in 1862, but in 1864, because of Indian, Mediterranean, and Brazilian imports, they exceeded 2,500,000 bales, and the imports of non-American cotton into continental Europe also increased from 100,000 bales in 1860 to 889,000 in 1864. The importation of foreign cotton did not, however, solve the cotton famine, for the short-staple cotton of India was unsuited to most of the spindles of England and to many of those in continental Europe. The constant delay due to breaking threads made the name "Surat" a hated epithet in Lancashire.⁴

Although the suffering of the British cotton interests was severe, the hopes of the South for foreign intervention were not realized. Southern cotton was not of sufficient importance to bring about British intervention, or even to induce England to recognize officially the independence of the Confederacy. The people of Great Britain did not favor slavery, and the Government was prevented from recognizing the revolting States.

THE WAR AND THE IMPORT TRADE.

The import trade during the war of secession likewise was maintained at a surprisingly high level, but after 1861, as is shown in table 53, it did not exhibit the activity which characterized the export trade of the Northern States. The direct import trade of the South, aside from the occasional arrival of blockade-runners, came to an end, and that portion of the import trade which had in times of peace entered the

¹Arnold, *The Cotton Famine*.

²Ellison, *The Cotton Trade of Great Britain*, 95.

³Williams (an English broker), "Position of the Cotton Trade at the close of February, 1863," in *Political Economy Pamphlets*, No. 277.

⁴Hammond, *The Cotton Industry*, pt. 1, 276.

South indirectly through northern ports was small throughout the war. The high import duties imposed as a means of raising the necessary war revenue acted as a partial barrier to all imports, and the increased output of nearly all the manufacturing industries of the Northern States, except the cotton mills and whisky distilleries, supplied an enlarged portion of the American market for manufactures.

While, on the whole, the imports of the Northern States were well maintained and their exports were in a prosperous condition, one phase of their trade—one industry—suffered severely at the hands of Confederate cruisers and privateers.¹ "The most terrible blow struck by the war upon any interest was that upon the merchant marine."² Just as the Napoleonic wars had benefited American shipping, the Civil War aided the shipping of Great Britain and other foreign neutrals. The American marine decreased rapidly in consequence of the ruinous onslaughts of the *Alabama*, the *Shenandoah*, the *Sumter*, and some 22 other vessels which comprised the Confederate fleet of "commerce-destroyers." But a much more severe loss than the 284 or more northern merchant vessels captured, were the thousand vessels which, because of risks of capture and because of the excessive insurance rates, were transferred to foreign flags. Moreover, many American vessels remained idle, while the north Atlantic ports of the United States were crowded with British and other foreign ships. All shipping, moreover, was obliged to pay the increased tonnage duties levied to secure a larger revenue. As is shown in table 54, the American tonnage engaged in the foreign trade of the United States declined from 71 per cent of the total in 1860 to 46 per cent in 1864; and the proportion, calculated in terms of value, of the total recorded foreign trade of the country carried on in American bottoms fell from 66.5 per cent to 27.5 per cent. Such American vessels as did not remain idle were obliged to sail without full cargoes or with the less valuable cargoes, for few merchants intrusted their wares to an American vessel, if a foreign ship was available.

AFTER-EFFECTS OF THE WAR.

The effects of the Civil War upon the foreign trade did not end with the overthrow of the Confederacy. Certain after-effects, some injurious and others good, were felt for many years:

(1) The war left the cotton-export trade in a crippled condition from which it did not recover for more than a decade. It was not until 1875 that either the cotton crop or the amount shipped abroad permanently regained the volume of the years before the war. Meanwhile, cotton was no longer the king of exports, and it did not regain that position until the close of the nineteenth century. The cotton trade had to pass through long years of transition. There was abject poverty in

¹Edge, *The Destruction of the American Carrying Trade*.

²Fite, *Social and Industrial Conditions in the North during the Civil War*, 147.

many cotton-producing sections; buildings had been destroyed or had deteriorated; tools had been lost or broken; live-stock had been lost or confiscated; there was not food enough on some plantations to feed the owner and his former slaves until a new cotton crop had been harvested. To repair these losses and to secure the necessary capital required time.

The abolition of slavery, aside from the monetary loss entailed, overthrew the existing industrial structure. The situation appeared so hopeless that a general decline in southern land values occurred, causing the further impoverishment of the much-tried cotton planter. Great difficulty was experienced with the labor problem. To many negroes freedom meant idleness, and both for this reason and because of the difficulty of paying regular weekly or monthly wages, the "wage system" proved unsatisfactory. The plan generally adopted was the "cropping system," which took different forms, but was based upon the idea of giving the laborer an interest in the crop. Soon also there began a decided movement to change from the plantation system to that of smaller cotton farms owned by the individual cotton growers or worked by tenants. The number of farms of less than 100 acres in the cotton-belt grew from 333,000 in 1860 to 517,000 in 1870, and the average size of cotton farms declined from 401.7 to 229.8 acres.

The change from plantation to small farm required a new agricultural credit system. Even before the war large planters had sometimes borrowed money from the port factors, or from large interior bankers, with the growing crop as collateral. After the break-up of the large plantations, however, the need of loans to tide the smaller growers over the planting, growing, and harvesting seasons became widespread, and as the amounts needed by individual growers were too small to warrant dealing with distant port factors, they turned instead to the local merchant, banker, and landlord. The loaning system was expensive, although necessary at the time, and it still prevails throughout many sections of the Eastern cotton-belt.

After the war, also, the system of marketing directly through port "factors" was largely displaced by the system of sales to interior merchants; a practice which involved the use of many middlemen. The grower sold to the local merchant, landlord, or banker to whom he had pledged all or part of his crop. Then the cotton exported to England often passed successively from the local buyer to the commission men at the larger interior centers, to the dealers at the ports of export, to the local agents of exporting companies, to importers at Liverpool, and finally through Liverpool brokers to the spinners at Manchester. Since the later seventies the tendency has been to eliminate superfluous dealers, but during the transition period and until the financial condition improved, until the Atlantic cable made possible direct sales, and until the competition between spinners became more general, the expensive system of conducting business through many middlemen prevailed.

(2) For many years after the close of the war, the import trade of the Southern States was in a crippled condition. The purchasing power of the cotton planters had been greatly reduced, and the negroes were without resources. While the practice of growing almost nothing but cotton was conducive to the development of the import trade, the limited ability to purchase prevented its attaining a large volume.

(3) The crushing effect of the Civil War upon the American merchant marine was more than temporary. Probably the marine would ultimately have declined even had there been no war,¹ but, coming at a critical time, the four years of competition with neutral vessels, transfer to foreign flags, Confederate captures, and high insurance rates and tonnage taxes constituted a blow from which the deep-sea fleet has never recovered. The war came at the time when the shift from steam to sail and from wood to iron and steel had begun to make headway in the ship-building industry, and when other fields of investment began to attract capital. The Government did almost nothing to assist the ship-owners in their hour of need. Congress refused to readmit to American registry the vessels that had been transferred to foreign standards, did not repeal the war tonnage taxes until 1868, did not permit the free importation of materials for wooden sailing-vessels until 1872 and for iron and steel vessels until 1890, and made no provision for liberal ocean mail payments. But three unimportant mail payment contracts were let during the entire period from the Civil War to 1891. During the decade 1865 to 1875, when foreign vessels were no longer benefited by a condition of neutrality, the American proportion of the total vessel movement in the foreign trade, instead of recovering, declined from 47 per cent to 30 per cent; the proportion of the foreign trade carried in American bottoms fell from 27.7 per cent to 26.1 per cent; and the registered merchant fleet of the United States dropped from 1,602,000 to 1,554,000 gross tons.

(4) The Civil War did much to strain the friendly relations which had existed between the United States and Great Britain. For commercial reasons, if not for other purposes, the British Government had sympathized with the Southern States. She had granted them the rights of a belligerent, had permitted the construction and equipment of Confederate warships at British ports, and had connived in the practice of blockade-running. The British West Indies, the Bermudas, and Nassau had been favored havens of southern blockade-runners, and Canada had been a base for a number of unimportant southern attacks in New York and Vermont.² Though the more conservative public leaders in the United States successfully discouraged the desire to retaliate, the feeling of resentment ran high. It was partly for this reason that the reciprocity treaty with Canada was not renewed in

¹Johnson, *Ocean and Inland Water Transportation*, chap. xx.

²Headley, *Confederate Operations in Canada and New York*.

1866. The road returning to friendship was not paved until 1872, when the arbitration tribunal at Geneva awarded \$15,500,000 to the United States for vessels destroyed by Confederate men-of-war built in British ports.

(5) The high import duties which had been imposed for revenue purposes during the war were maintained after the return of peace in pursuance of a protective tariff policy. Low tariffs had prevailed during the years 1846 to 1860, but the war made higher duties a necessity and protective sentiment was sufficiently strong to maintain and even to increase the high duties after the war ended. The South, which had for many years been the chief opponent of protection, was for a time unable to offer serious opposition, and the West and East, respectively, were generally in favor of home markets for farm products and protection for industries. The high duties were a partial barrier against foreign imports, and to whatever extent they developed home markets, they tended to restrict the exportation of farm products. In the proportion that they contributed to the growth of the manufacturing industries, they may have led the way to a larger export trade in manufactured goods.

(6) The Civil War affected the foreign trade not only through its influence upon the tariff policy, but also by encouraging the concentration of capital. The expansion of business in the Northern States, which occurred during the war, caused the free competitive system to begin to break down. During the war consolidation began, and the process has continued to the present in almost every branch of business except agriculture. Its effects on commerce, domestic and foreign, have been manifold. Aside from the many effects which are the subject of controversy, it has been clear that the large producers have been better able to compete successfully with producers of foreign wares; and that, with certain exceptions, the rapid progress which has been made in the exportation of manufactures has been brought about largely through the efforts of the great industrial consolidations.

(7) It was during the war that the first effective encouragement was given to the long-discussed construction of transcontinental railroads. For reasons, partly commercial and partly political and military, the Federal Government subsidized the Union Pacific-Central Pacific line with land grants of 20,000,000 acres and loans of \$55,000,000 in government bonds. The hopes of developing Oriental commerce, of increasing trade between the Pacific coast and the Middle West and the East, of building up local traffic by developing the far western country, and of realizing profit from the sale of land were the commercial motives of the undertaking, but the reason why men of political prominence took an unusual interest in the project was the desire to connect the West with the East, to tie California and the northwest country to the settled regions of the Union and thereby prevent the likelihood of

foreign invasion or secession. The policy of subsidizing transcontinental railroads once being established, various other lines also obtained extensive grants of public land, and the opening of the West was hastened, with obvious effects upon the foreign as well as the internal commerce of the entire country.

(8) Wildcat banking was at its height during the first part of the Civil War, but when effective financing was essential to the successful prosecution of the war, the Federal Government provided for the regulation of the banking system of the country. The enactment of the national banking act in 1863 proved of incalculable aid to commerce, but since its influences were not peculiar to the foreign trade, it need not be more fully discussed at this point. Numerous States and many voluntary banking associations also undertook banking and currency reforms during the war, and a general effort was made—State and national—to suppress counterfeiting.

The Civil War was in many ways epochal in the history of the foreign commerce of the United States, though it can not be said that the results of the conflict taken as a whole worked directly towards a greater foreign trade. For many years to come the conscious policy of the nation was the development of American industries and the creation of home markets. Internal development, however, so increased the volume of the agricultural crops and the output of the forest, mining, and manufacturing industries, that a growth of exports became inevitable and the consequent increase in the purchasing power of the people and the growing need for the raw materials from other lands laid the basis for a greater import trade. The Civil War also emphasized the vastness of the country's resources. Four years of the bitterest conflict caused scarcely a ripple in the course of economic progress in the Northern States. Foreign markets replaced the domestic markets which were temporarily lost or shrunken, and the development of resources and industries which began before the war was continued. The South, which was stricken with all the losses incident to a crushing defeat, quickly recovered. Her staple crop is again the king of exports; her lumber, her naval stores, and her tobacco are of international importance. Her fruit, rice, sugar, iron, oil, coal, and phosphate, each in its way, influence the course of foreign trade, some products being exported, while others have displaced foreign commodities which would otherwise be imported from abroad.

CHAPTER XXVI.

THE FOREIGN TRADE FROM THE CIVIL WAR TO THE CLOSE OF THE NINETEENTH CENTURY.

Increase in import and export trade, 64. Price fluctuations, 1870-1900, 65. Changing relations between imports and exports, 66. The leading exports of the United States, 66. Growth in value of each, 1865-1900, 67. Domestic exports classified according to uses, 70. The growth of foreign markets, 72. Value by groups of the leading imports of the United States, 77. Sources of the imports into the United States, 78. Widened basis of American foreign trade, 81. The carrying trade, 84.

At the close of the Civil War there was a brisk recovery of the foreign trade of the United States. The imports and exports of the Northern States, which had been maintained even during the war, took an upward course, and those of the Southern States soon recovered much of their former volume. As soon as the ruined cotton plantations could be reorganized, the exports of cotton shipped from southern ports again increased, and other southern commodities were shipped abroad; but the import trade of the South lagged behind because the purchasing power of the population had been greatly reduced by the ravages of the war.

The value of the total exports of merchandise quickly rose from \$166,029,000 in 1865 to \$348,859,000 in 1866, and imports grew from \$238,745,000 to \$434,812,000. This sudden advance was, to some extent, abnormal, both exports and imports consisting in part of cargoes which had been held back by merchants awaiting the return of peace; moreover, the increase was apparent rather than real, the augmented value being due partly to an abnormal rise of prices. For several years thereafter the foreign trade remained at a somewhat lower level, but by 1870 there was a widespread recovery. Imports of merchandise in that year aggregated \$435,958,000 and exports \$392,772,000.

From 1870 to the end of the nineteenth century there was a pronounced, though at times irregular, growth in the foreign trade. Imports of merchandise increased to a value of \$667,955,000 in 1880 and to \$849,941,000 in 1900. Exports of merchandise increased even more rapidly, and with almost uniform regularity they exceeded the value of imports. In 1880 they amounted to \$835,639,000 and in 1900 \$1,394,483,000. The value of the annual imports of merchandise increased 95 per cent from 1870 to 1900, and that of exports 255 per cent. The total entrances and clearances at American ports of shipping engaged in the foreign trade, as is shown in table 55, increased from 18,325,000 tons in 1870 to 56,444,000 in 1900, an advance of 208 per cent.

The wide fluctuations in the prices of commodities which occurred during the period 1865 to 1900 exerted a direct influence upon the value

of imports and exports as reported to the customs collectors, and it is necessary to analyze the figures of foreign trade values with unusual care. The course of prices in the United States can be ascertained with reasonable accuracy from the price index numbers compiled by the Bradstreet and Dun commercial agencies, by the Aldrich Committee of the Senate in its report on wholesale prices,¹ and by the United States Bureau of Labor, while from the *London Economist* and from the tables compiled by Mr. Augustus Sauerbeck² price movements for Great Britain may be obtained. The annual average export and import prices of particular commodities may also be ascertained.

TABLE 55.—Value of exports and imports of the United States. Vessel entrances and clearances, five-year periods, 1865 to 1900.¹

Year.	Exports of merchandise.	Exports of merchandise and specie.	Imports of merchandise.	Imports of merchandise and specie.	Excess of total exports.	Entrances and clearances in foreign trade.
						<i>gross tons.</i>
1860	\$333,576,000	\$400,122,000	\$353,616,000	\$362,166,000	\$37,956,000	17,065,000
1865	166,029,000	233,673,000	238,746,000	248,556,000	² 14,883,000	12,781,000
1870	392,772,000	450,927,000	435,958,000	462,377,000	² 11,450,000	18,325,000
1875	513,443,000	605,575,000	533,005,000	553,906,000	51,669,000	23,589,000
1880	835,639,000	852,782,000	667,955,000	760,989,000	91,793,000	36,054,000
1885	742,190,000	784,421,000	577,527,000	620,770,000	163,652,000	30,820,000
1890	857,829,000	909,977,000	789,310,000	823,287,000	86,690,000	36,256,000
1895	807,538,000	921,302,000	731,970,000	788,566,000	132,736,000	39,045,000
1900	1,394,483,000	1,499,462,000	849,941,000	929,771,000	569,691,000	56,444,000

¹Commerce and Navigation of the United States, 1906, p. 41.

²Excess of imports.

All of these various price records indicate that prices were abnormally high during the Civil War and for several years afterward, and that the high value of the imports and exports in 1866 was partly due to inflated prices. They show that there was some decline in American prices from 1867 to 1869 and of English prices to 1870; an increase of American prices from 1869 to 1872 and of English prices from 1870 to 1873; and a general fall from 1873 to 1879. In 1880 both English and American prices increased slightly, the former rising until 1882, but the latter immediately resumed the decline, which continued until 1887. Prices then underwent a slight recovery, but from 1891 to 1896 both American and British prices moved slowly downward. The closing years of the century again witnessed a rising level of prices.

Price fluctuations make it impossible to accept the value of imports and exports for all the years of this period as a true record of the trade movement. The value returns of the years 1870, 1880, 1890, and 1900

¹Wholesale Prices, Wages, and Transportation. 4 parts. Report by Mr. Aldrich from the Committee on Finance. (Senate Doc. 1394, 52 Cong., 2 sess., March 3, 1893.)

²Sauerbeck (compiler). *The Course of Average Prices of General Commodities in England.* (London, 1908.)

may, however, be accepted as a conservative index of the actual increase which occurred. The index numbers of the Aldrich Committee and the United States Bureau of Labor show American price indices during these years of 117.3, 106.9, 112.9, and 110.5, respectively, and Sauerbeck's corresponding index numbers were 96, 88, 72, and 75. On the whole the average level of prices was higher during the first than the last half of the period 1865 to 1900, and statistics of value therefore do not overstate the increase in the volume of the foreign trade. The danger of being misled by price fluctuations may be readily avoided by ascertaining the quantities of the leading commodities exported and imported, and the volume of shipping required to handle the foreign trade.

During the period from the Civil War to the end of the nineteenth century the relations between imports and exports gradually changed. Although there had in various earlier years been an excess of exports, the usual condition was an excess of imports. From 1874 to 1900, however, the value of the exports of merchandise exceeded that of imports of merchandise in every year except in 1875, 1888, 1889, and 1893. The excess was subject to great variations, but it gradually increased in amount, reaching its highest point in 1898 with \$615,000,000. After 1874 there was also an excess of total exports, including merchandise, gold, and silver, in every year except 1887 and 1888, its highest point being reached in 1900 with a total of \$570,000,000. Meanwhile large sums of foreign capital were being invested in the United States, interest and dividends were paid on these investments, increased payments for freight services were made to foreign ship-owners, large sums were expended abroad by American tourists, immigrants were sending funds to friends and relatives in Europe, and growing sums were paid to foreign marine and fire insurance companies. The trade balance, however, as the term is generally used by importers and exporters, was in favor of the United States, the exports being permanently in excess of imports.

THE LEADING EXPORTS OF THE UNITED STATES.

In giving an account of the foreign trade of the United States from 1865 to 1900 it will not be necessary to set forth the causes which brought about the extraordinary commercial development that was characteristic of these thirty-five years. Chapters XV to XVII, Vol. I, state the facts as to the history of the internal commerce of the United States from the Civil War to the close of the nineteenth century and present the main facts as to the economic development, which carried with it not only the very rapid expansion of internal commerce, but also the unprecedented increase in the international trade of the United States.

As a consequence of the changes in production, there were several important modifications in the relative positions occupied by the commodities comprising the export trade of the United States during the

period from 1865 to 1900. Throughout the period as a whole, the chief item was the breadstuffs of the West. The expansion of the foreign grain trade had begun before the Civil War; and with the southern market temporarily closed during the years 1860 to 1865, wheat exports increased nine-fold. With the reopening of the southern market at the close of the war, grain exports declined for a time, but soon advanced again in consequence of the tremendous increase in grain production and of the enlarged European demand for breadstuffs.

In 1880, 180,304,000 bushels of wheat and 99,572,000 bushels of corn were shipped abroad. The value of all the exports of breadstuffs in 1880 was \$288,037,000, as compared with cotton exports valued at \$211,536,000. Wheat exports continued at a remarkably high level throughout the remainder of the century. The exports of wheat in 1899 amounted to 222,618,000 bushels and in 1900 to 186,096,000 bushels, or 34 per cent of the year's crop. In the latter year 54.9 per cent of wheat exports were shipped as grain and 45.1 per cent as flour, the proportion shipped as flour having gradually risen from an average of 22.5 per cent during the decade of 1871-1880. Corn exports also increased rapidly, rising from an annual average of 55,078,000 bushels or 4.6 per cent of the crop in the decade 1871-1880 to over 213,000,000 bushels or 10.3 per cent of the crop in 1900, this being the largest volume of corn ever shipped abroad in a single year. The value of all breadstuffs exported in the closing year of the century was \$262,744,000 or \$20,000,000 in excess of the value of cotton exports.

Cotton was a close rival of grain in the export trade, and at various times during this period it exceeded grain in value. The exports of cotton amounted to 2,923,000 bales in 1870 as compared with 3,535,000 bales in 1859, but by 1880 they had again increased to 4,453,000 bales, and 6,807,000 bales were exported in the fiscal year of 1900. Throughout the entire cotton-belt the increase of production was so rapid that cotton growers from 1890 to 1900 suffered from low prices. The export trade was their principal source of profit, 66.8 per cent of their crop being exported in 1900, and from 59.2 to 82.5 per cent of each annual crop during the entire period from 1865 to the close of the century.

Exports of meat and meat products, which had made but small beginnings before the Civil War, soon came to rank as third in importance among the exported commodities of the United States. Their value rose from \$35,072,000 in the fiscal year 1865 to \$113,769,000 in 1880 and \$175,226,000 in 1900. The packing industries produced more than the home market would readily absorb and consequently large quantities of pork and beef products were shipped abroad. By 1880 pork products valued at \$84,838,000 were exported, and by 1900 this trade had grown to \$112,159,000. Beef exports were less important, for beef was better adapted to the American market and could readily

be sold at home, but exported beef products likewise advanced from a value of \$10,323,000 in 1880 to \$42,170,000 in 1900. The total foreign provision trade, including dairy products, grew from a value of \$30,250,000 in 1870 to \$129,887,000 in 1880 and \$184,453,000 in 1900. Live animals, consisting chiefly of beef cattle, were also exported to an increasing extent, the value of the annual exports advancing from \$1,045,000 in 1870 to \$15,882,000 in 1880 and \$43,585,000 in 1900.

During the latter half of the period iron and steel manufactures became a notable export. Before the war the annual value of iron and steel exports was less than \$6,000,000, and as late as 1880 their value was less than \$15,000,000. Thereafter, however, it began to increase, reaching a total of \$25,542,000 in 1890 and \$121,914,000 in 1900. The iron and steel products comprising this huge export trade included a large and constantly growing variety of manufactures, such as builders' hardware, locomotives and engines, rails, electrical machinery, wire, pipes, metal-working machinery, structural materials, boilers and plates, and even the finer wares, such as sewing machines, cash registers, and typewriters. Pig-iron exports valued at \$3,125,000 were included in the iron and steel trade of the fiscal year 1900, but neither pig-iron nor iron ore were exported in large amounts. The exports of pig-iron in 1900, for instance, comprised but 160,690 tons out of a total production of 13,621,000 tons.

Refined mineral oil became the commodity of fifth importance among the domestic exports. In 1859 not a single gallon of mineral oil had been shipped abroad, but in 1870 the oil exports of the country were valued at \$32,666,000, in 1890 at \$51,403,000, and in 1900 at \$75,612,000. In the last-mentioned year the exports of illuminating oil were valued at nearly \$56,000,000, the remainder consisting of lubricating oil, heavy paraffin, and miscellaneous refined oils and by-products. The foreign trade was of vast importance to the petroleum industry, more than half of the total output of illuminating oil being exported in 1900.

During the decade 1890 to 1900 copper products became an important item in the export trade. As late as 1880 the copper exports were valued at less than \$1,000,000, and from the Civil War to 1891 they ranged from \$1,000,000 to \$5,000,000 annually. They then grew from \$7,226,000 in 1892 to \$57,852,000 in 1900. This extraordinary growth was largely due to the rise of an urgent demand for copper throughout the world when electricity came into general use for motive-power and lighting purposes. Copper exports consisted largely of refined copper ingots, bars, and plates, such exports being valued at \$55,772,000 in 1900. The remainder consisted of copper ore and miscellaneous copper manufactures.

The foreign lumber trade after 1880 was placed upon a firmer basis than it had occupied since colonial days. The export lumber move-

ment began before the Civil War, but the position which the trade had then attained was barely maintained until 1880. Then, chiefly because of the rise of the southern lumber industry, the foreign trade began to grow, the exports of lumber and timber gradually climbing from a value of \$12,524,000 in 1880 to \$39,366,000 in 1900. The total annual exports of wood and wood manufactures during the same period grew from \$16,237,000 to \$50,598,000. At the same time appreciable gains were made in the exportation of minor forest products. The exports of naval stores advanced from a value of \$4,585,000 in 1880 to \$12,474,000 in 1900.

TABLE 56.—Domestic exports grouped according to sources of production, five-year periods, 1865-1900.¹

Year.	Agriculture.		Manufactures.		Mining.	
	Value.	Per cent.	Value.	Per cent.	Value.	Per cent.
	<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>	
1865	156,663,000	60.46	59,037,000	22.78	10,792,000	4.17
1870	361,188,000	79.35	68,280,000	15.00	5,026,000	1.10
1875	430,307,000	76.95	92,679,000	16.57	6,469,000	1.15
1880	685,961,000	83.25	102,856,000	12.48	5,863,000	.71
1885	530,173,000	72.96	147,188,000	20.25	15,798,000	2.18
1890	629,821,000	74.51	151,102,000	17.87	22,298,000	2.64
1895	553,210,000	69.73	183,596,000	23.14	18,510,000	2.33
1900	835,858,000	60.98	433,852,000	31.65	37,844,000	2.76

Year.	Forest.		Fisheries.		Miscellaneous.		Total value.
	Value.	Per cent.	Value.	Per cent.	Value.	Per cent.	
	<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>
1865	14,858,000	5.73	4,795,000	1.85	12,981,000	5.01	259,125,000
1870	14,898,000	3.27	2,836,000	.62	2,981,000	.66	455,208,000
1875	19,166,000	3.43	4,875,000	.87	5,743,000	1.03	559,238,000
1880	17,321,000	2.11	5,255,000	.64	6,689,000	.81	823,946,000
1885	22,015,000	3.03	5,955,000	.82	5,555,000	.76	726,683,000
1890	29,473,000	3.49	7,458,000	.88	5,141,000	.61	845,294,000
1895	28,576,000	3.61	5,329,000	.67	4,172,000	.52	793,393,000
1900	52,218,000	3.81	6,327,000	.46	4,665,000	.34	1,370,764,000

¹U. S. Bureau of Statistics, "Exports of Manufactures from the U. S. and Their Distribution, 1790-1902," from *Monthly Summary of Commerce and Finance*, April 1903, p. 3249.

During the latter half of the period from 1865 to the close of the nineteenth century, various other exports became of importance, but as it was only during the last decade (1890 to 1900) that they advanced with marked rapidity, they are more appropriately regarded as special features of the trade of the twentieth century. In 1900 leather and leather goods were exported to the value of \$27,293,000; cotton manufactures, \$24,003,000; coal, \$19,503,000; oil-cake and oil-cake meal, \$16,758,000; vegetable oils, \$16,345,000; agricultural implements, \$16,099,000; and chemicals, drugs, etc., \$13,203,000.

Throughout the period from the Civil War to 1900, the export trade depended chiefly upon agricultural products, including in that group of

exports flour, meal, glucose, cotton-seed oil, butter, cheese, and similar semi-agricultural commodities. (See table 56.) Of the country's entire exports 79.4 per cent consisted of farm products in 1870; 83.3 per cent in 1880; 74.5 per cent in 1890; and 60.9 per cent in 1900. These proportions, which are based upon the total value of the export trade, are somewhat lower than in the trade period immediately before the Civil War (1815-1860), when they never fell below 75 per cent of the total and usually exceeded 80 per cent. It is notable, however, that, though farm products continued to be of greater value in the export trade, their relative position was gradually lowered by the rise in the exports of manufactures, minerals, and forest products. During the last decade of the century, the ratio of the value of agricultural products to the total value of our exports fell from 74.5 per cent to 60.9 per cent, although the value of farm exports increased from \$629,821,000 to \$835,858,000.

The exports of domestic manufactures, including such articles as refined copper and refined petroleum, as well as finished manufactured products, though of less value during this period than farm products, increased more rapidly during the last two decades of the century than any other group of exports, gradually rising in value from \$102,856,000 in 1880 to \$433,852,000 in 1900. In the former year they comprised 12.4 per cent and in the latter year 31.7 per cent of the total exports of the country.

The exports of forest products rose in value from \$17,321,000 in 1880 to \$52,218,000 in 1900, or from 2.1 per cent to 3.8 per cent of the total, and during the same two decades the annual foreign shipments of crude minerals rose from \$5,863,000 to \$37,844,000, or from 0.7 per cent to 2.8 per cent of the total export trade.

The exports of fish and fish products gradually declined in relative importance, although their total value slowly increased. The whale fisheries had reached their climax in the fifties, and by the end of the nineteenth century they were but a shadow of what they had previously been. The cod and other Atlantic coast fisheries remained an important industry, but their output was barely sufficient to supply the American market with fresh fish. The increase in fish exports was mainly in the salmon fisheries of the Pacific coast. These fisheries became important during this period and, a sufficient local market not being available, large quantities of their products were shipped abroad as well as to the domestic markets of the central West and Atlantic States.

DOMESTIC EXPORTS CLASSIFIED ACCORDING TO USES.

It is instructive to classify domestic exports according to their uses. Such a classification shows (table 57) that exports of crude foodstuffs and food animals increased from a value of \$41,852,000 in 1870 to

\$266,108,000 in 1880 and \$227,347,000 in 1900. Relative to the total exports of the country this group occupied its highest position in 1880, when it comprised 32.3 per cent of the total. From then until the end of the century there was a general tendency to export flour rather than wheat, and this change, together with the rapid growth of the exports of manufactured, mineral, and forest products, caused the proportion of this group to decline slowly to 16.6 per cent in 1900.

TABLE 57.—Domestic exports grouped according to their uses, five year periods, 1865-1900.¹

Year.	Foodstuffs in crude condition and food animals.		Foodstuffs partly or wholly manufactured.		Crude materials for use in manufacturing.	
	Value.	Per-centage of total.	Value.	Per-centage of total.	Value.	Per-centage of total.
	<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>	
1865	13,975,000	10.20	47,981,000	35.04	33,852,000	24.71
1870	41,852,000	11.12	50,919,000	13.53	213,440,000	56.64
1875	79,078,000	15.84	110,292,000	22.09	206,272,000	41.31
1880	266,108,000	32.30	193,353,000	23.47	238,788,000	28.98
1885	123,327,000	16.97	201,800,000	27.77	248,611,000	34.22
1890	132,073,000	15.62	224,756,000	26.59	304,567,000	36.03
1895	99,051,000	12.49	219,125,000	27.62	264,195,000	33.30
1900	227,347,000	16.59	318,127,000	23.28	325,589,000	23.75

Year.	Manufactures for further use in manufacturing.		Manufactures ready for consumption.		Miscellaneous.		Total value.
	Value.	Per-centage of total.	Value.	Per-centage of total.	Value.	Per-centage of total.	
	<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>
1865	10,650,000	7.79	30,121,000	22.00	361,000	.26	136,940,000
1870	13,712,000	3.66	56,329,000	14.96	363,000	.09	376,616,000
1875	27,458,000	5.50	74,503,000	14.92	1,680,000	.34	499,284,000
1880	29,044,000	3.52	92,774,000	11.26	3,878,000	.47	823,946,000
1885	39,437,000	5.42	110,819,000	15.25	2,689,000	.37	726,683,000
1890	46,455,000	5.50	132,527,000	15.68	4,915,000	.58	845,294,000
1895	61,813,000	7.78	143,245,000	18.06	5,963,000	.75	793,393,000
1900	152,891,000	11.15	331,956,000	24.15	14,855,000	1.08	1,370,764,000

¹U. S. Bureau of Statistics, *Exports of Manufactures from the United States and Their Distribution, 1800-1906*, p. 27.

A second group of exports consisted of foodstuffs partly or wholly manufactured, the value of which rose from \$50,919,000 in 1870 to \$193,353,000 in 1880 and \$318,127,000 in 1900. Omitting from consideration the year 1865, which like other Civil War years was abnormal, the relative position of this group of exports slowly improved. In 1900 it comprised 23.2 per cent of the total value of domestic exports.

Exports of manufactures for further use in manufacturing advanced from \$13,712,000 or 3.7 per cent of the total in 1870 to \$152,891,000 or 11.2 per cent of the total in 1900; and exports of manufactures ready

for consumption were in the same years valued at \$56,329,000 or 14.9 per cent and \$331,956,000 or 24.2 per cent respectively. By combining the last two groups it is seen that there was a growth in the proportion of exports of all manufactures from 18.6 per cent in 1870 and 14.8 per cent in 1880 to 35.3 per cent in 1900.¹ The group of exports which, with the exception of the last few years, was largest throughout the period from the Civil War to the end of the century comprised crude materials for use in manufacturing. Its aggregate value advanced from \$213,440,000 in 1870 to \$325,589,000 in 1900. Its relative proportion was highest during the five years prior to 1870, when from 49.2 per cent to 67.4 per cent of all exports consisted of such materials. During the last decade of the century this group of exports still comprised from 23.7 per cent to 39.7 per cent of the total export trade.

THE GROWTH OF FOREIGN MARKETS.

Two striking facts relative to the foreign markets for American exports since the Civil War are noteworthy—the predominant importance of the established European markets and the relatively greater progress made during the last decade of the century in the newer markets of the world. During the Civil War, largely because of the declining trade with England, the European proportion of the total export trade fell from 77.5 per cent in 1860 to 59.9 per cent in 1865, but in 1866 it immediately rebounded to 81 per cent. From then until the closing decade, the proportion of the total exports marketed in Europe remained at a remarkably high level, ranging annually from 74.7 per cent to 86.1 per cent. The importance of the European market was greatest during the eighties, when the foreign grain trade was at its height, but in 1900 Europe still purchased 74.6 per cent of the country's total exports. The countries of Europe constituted the natural market for the surplus breadstuffs, cotton, meat products, beef cattle, leaf tobacco, mineral oil, lumber, and copper of the United States; and, for a time, it was not difficult for American exporters to sell iron and steel manufactures of many kinds in Europe.

America's greatest market was the United Kingdom. No sooner was peace between the North and South declared in 1865 than the British trade rose even higher than the exceptional position it had reached immediately before the war. By 1870 the trade of the United States with Great Britain had become highly prosperous, and it continued at a high tide even during the industrial depression of 1873. Though there were numerous fluctuations, the exports from the United States to the British market maintained a high level throughout the remainder of the century. They were valued at \$451,000,000 in 1880; \$444,500,000 in 1890; \$527,700,000 in 1900.

¹ The proportions differ slightly from the proportions given on page 69 in that they include items not included in the former definition of manufactures. Both classifications are from the reports of the United States Bureau of Statistics.

American exports to the countries of northern Europe were likewise large in volume. In spite of the protective tariff wall which Germany erected against many American products, the imports into Germany of American cotton, breadstuffs, copper, petroleum, lumber, tobacco, oil-cake, and cotton-seed oil continued to increase almost without interruption. American cotton goods, machinery, and other iron and steel goods also found a German market; and though tariff duties and trade regulations effectively restricted the imports of beef cattle and dressed meats, the German market accepted increased shipments of American meat products. American agricultural exports were expressly granted the conventional German tariff schedule under the agreements of 1892 and 1900. In 1880 when the export trade was in the midst of the first great period of expansion subsequent to the Civil War, the exports of domestic merchandise to the German Empire were valued at \$50,292,000, and they gradually increased to \$184,648,000 in 1900.

With the exception of Russia, there was gratifying progress in the exports of the United States to all the other countries of northern Europe. Domestic exports to the Netherlands increased from \$16,800,000 in 1880 to \$89,116,000 in 1900, and those to Belgium from \$33,715,000 to \$47,756,000. Both of these countries imported more foreign wares than were needed for home consumption, and distributed them throughout the interior of Europe. The domestic exports to Austria-Hungary grew from \$2,304,000 in 1880 to \$16,826,000 in 1900; those to Denmark from \$3,477,000 to \$18,469,000; and those to Norway and Sweden from \$2,365,000 to \$10,432,000.

In contrast with the increasing export trade of the United States with the United Kingdom and northern Europe, the commerce with the countries of southern Europe was not in a prosperous condition. Immediately after the Civil War trade with southern Europe rebounded to a level higher than it had occupied in 1860, but thereafter it made little progress. The exports of domestic merchandise to France in 1880 were valued at \$98,800,000 as compared with \$81,994,000 in 1900, and their value was considerably less throughout most of the intervening years. In 1880, likewise, the domestic exports to Spain were valued at \$14,600,000 and those to Portugal at \$14,500,000, while in the closing year of the century they were valued at \$13,385,000 and \$5,886,600 respectively. Of the important southern European nations, Italy alone imported increasing quantities of American products, the exports to that country rising from \$12,348,000 in 1880 to \$33,059,000 in 1900.

The export trade with southern Europe lagged chiefly because that portion of Europe was not in a prosperous condition. Spain and Portugal in particular were industrially and commercially backward. The countries of southern Europe, moreover, maintained high tariff duties upon imports. France raised her import duties on wheat in

1885, and in 1892 adopted a maximum and minimum tariff, the maximum schedule being applied to all American products except a small number of minor importance which were exempted under the agreement of 1898. Spain, likewise, adopted the French dual tariff system and imposed the maximum rates upon American products. Portugal and Italy applied the maximum schedule to all American wares except a few specified in the agreements of 1900, the very close of the trade era under consideration.

When during the last twenty years of the nineteenth century, American manufacturing interests began seriously the work of developing a foreign market, the trade for exports was extended over a wider area. Europe, by purchasing most of the surplus of agricultural products and raw materials, continued to lead in the foreign trade of the United States, but after 1890 the European proportion of the total exports of the United States slowly declined. American products had been shipped to distant countries even before the beginning of the nineteenth century, but the primary purpose of that trade had been to obtain valuable cargoes of imports. The time had now come when American exporters sought these countries primarily as markets for American manufactures.

The value of the exports from the United States to the several continents of the world and the proportion of the total shipped to each are shown in table 58. Among the leading individual countries which imported growing volumes of American goods were Canada, Mexico, Argentina, South Africa, Japan, China, and British Australasia. As the central and western farming regions of Canada were opened, as transportation connections were improved, and the Hudson Bay Company lost its grip upon the undeveloped sections of that country, domestic exports from the United States to Canada slowly but irregularly grew from \$39,508,000 in 1870 to \$88,030,000 in 1900. After the Civil War the Mexican trade was sluggish for thirty years, but after 1895 it began to prosper, domestic exports to Mexico advancing from \$14,582,000 in that year to \$33,704,000 in 1900. The total export trade with foreign North America, as a whole, grew from \$68,962,000 in 1870 to \$187,595,000 in 1900, but its importance relative to the export trade with all countries remained substantially unchanged, because the activity of the Canadian trade was counterbalanced by long-extended depression in the trade with the West Indies and Central America.

Except in the case of the trade with Argentina, which became unusually active during the last decade of the century, the commerce of the United States with the countries of South America made little or no progress during this period. The exports to Argentina advanced in value from \$8,320,000 in 1890 to \$11,263,000 in 1900, and the foundation was laid for the rapid progress made in the commerce with that country since 1900. Trade with Brazil languished, however, the ex-

ports from the United States to the Brazilian markets actually declining during the closing decade of the century, and the trade with other countries of South America remained in an apathetic condition.

TABLE 58.—Exports of merchandise from the United States, by continents, 1865-1900.¹

Year.	Europe.		North America.		South America.	
	Value.	Per-centage of total.	Value.	Per-centage of total.	Value.	Per-centage of total.
	<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>	
1865.....	201,758,000	59.92	94,838,000	28.17	21,607,000	6.42
1866.....	458,310,000	81.05	67,332,000	11.91	17,924,000	3.17
1870.....	420,184,000	79.35	68,962,000	13.03	21,651,000	4.09
1875.....	533,545,000	80.17	86,166,000	12.95	24,097,000	3.62
1880.....	719,434,000	86.10	69,438,000	8.31	23,190,000	2.77
1885.....	599,241,000	80.75	76,765,000	10.34	27,735,000	3.74
1890.....	683,736,000	79.74	94,100,000	10.98	38,753,000	4.52
1895.....	627,928,000	77.76	108,576,000	13.45	33,526,000	4.15
1900.....	1,040,168,000	74.60	187,595,000	13.45	38,946,000	2.79

Year.	Asia.		Oceania.		Africa.		Total value.	Per capita.
	Value.	Per-centage of total.	Value.	Per-centage of total.	Value.	Per-centage of total.		
	<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>	<i>dollars.</i>
1865.....	8,530,000	2.53	7,552,000	2.24	2,412,000	0.72	336,697,000	4.78
1866.....	11,799,000	2.09	7,675,000	1.36	2,385,000	.42	565,425,000	9.84
1870.....	10,972,000	2.07	4,335,000	.82	3,415,000	.64	529,519,000	9.77
1875.....	13,972,000	2.10	4,277,000	.64	3,471,000	.52	665,528,000	11.36
1880.....	11,646,000	1.39	6,847,000	.82	5,084,000	.61	835,639,000	16.43
1885.....	20,740,000	2.79	13,605,000	1.83	4,104,000	.55	742,190,000	12.94
1890.....	19,697,000	2.30	16,460,000	1.92	5,082,000	.54	857,829,000	13.50
1895.....	17,325,000	2.15	13,109,000	1.62	7,075,000	.87	807,538,000	11.51
1900.....	64,914,000	4.66	43,391,000	3.11	19,470,000	1.79	1,394,483,000	17.96

¹U. S. Bureau of Statistics, *Analysis of the Foreign Trade of the United States, 1895-1905*, p. 139.

After 1868, when the feudal system was abolished in Japan, the exports to that country advanced with unusual rapidity. From less than \$90,000 in 1860, their annual value leaped to \$2,526,000 in 1880 and to \$29,043,000 in 1900, the commodities sold consisting chiefly of cotton, oil, flour, tobacco, provisions, and iron and steel products of many kinds which were used in building up the industries of Japan. The export trade with China, which had suddenly risen shortly after the treaty of 1842, fluctuated irregularly until after the Japanese treaty of 1895. It then increased from \$3,603,000 in that year to \$15,213,000 in 1900. During the sixties, moreover, in addition to the exportation of merchandise to the Far East, there began the shipment of large quantities of specie. A "trade dollar" expressly designed for the Oriental trade was coined in the United States. It contained three-fourths

of a grain more silver than the Mexican dollar which circulated widely in the Far East, and it was successfully introduced into China, being made legal tender at various treaty ports. Its coinage was discontinued in 1877, and since then it has been coined on but few occasions. In 1887, \$7,689,000 were redeemed, but practically all of the remainder of the 35,965,924 trade dollars are still in circulation in the Orient.

The commerce of South Africa increased somewhat after the diamond discoveries of 1867. The gold discoveries of 1869 caused a still larger demand in South Africa for imported commodities, but the trade was largely controlled by British merchants. The Anglo-Boer war, however, by creating a market for American horses, mules, and provisions, caused a sudden rise in the exports from the United States to British Africa from a value of \$5,191,000 in 1895 to \$11,289,000 in 1896. Having once obtained a foothold, American exports continued to increase, a South African market being found for mining, railroad, and farming machinery, structural iron and steel and hardware, flour and provisions, liquors, petroleum, lumber, and wood manufactures. The exports to British Africa in 1900 were valued at \$16,256,000.¹

British Australasia, including Australia, Tasmania, and New Zealand, after passing through a gold-mining excitement, returned to agricultural and pastoral activities during the years 1860 to 1872, and then began to develop industrially. American exports to Australia grew slowly from \$3,420,000 in 1870 to \$11,168,000 in 1890; then they progressed more rapidly, reaching a total of \$26,584,000 in 1900. The old trade in breadstuffs and provisions, which arose during the mining boom from 1851 to 1860, was displaced by a more permanent trade in iron and steel manufactures, farm machinery, leather goods, lumber, paper, drugs, cotton textiles, furniture, and glassware.

VALUE BY GROUPS OF THE LEADING IMPORTS OF THE UNITED STATES.

Before the Civil War the principal group of imports had uniformly been manufactured wares; they had comprised over 70 per cent of the value of all imports in 1850 and 63.2 per cent in 1860, 56.5 per cent consisting of manufactures for consumption and 6.7 per cent of manufactures intended for further use in American industries. The proportion of finished manufactures declined during the war, and as American industries gradually grew and protective tariff duties were maintained after the return of peace, it not only failed to recover, but continued to decline throughout the remainder of the century. From 39.8 per cent in 1870 the proportion fell to 29.2 per cent in 1890 and to 23.9 per cent in 1900. The value of the imports of finished manufactured wares in 1900 was \$203,126,000, or much in excess of what it had been before the Civil War, but less than it had been during many years between 1870 and 1899. The imports of manufactures intended for further use

¹British South African exports not separately stated until 1902.

in American industries, such as certain chemicals, unset diamonds, lumber and hewn timber, tin in pigs and bars, and certain grades of iron and steel, increased in value from \$55,569,000 in 1870 to \$134,222,000 in 1900, or from 12.7 per cent to 15.8 per cent of the total imports. These commodities were, for the most part, on a different footing than finished manufactures, in that they served as raw materials for American industries.

TABLE 59.—Imports into the United States grouped according to their uses, 1865-1900.¹

Year.	Foodstuffs in crude condition, and food animals.		Foodstuffs partly or wholly manufactured.		Crude materials for use in manufacturing.	
	Value.	Percentage of total.	Value.	Percentage of total.	Value.	Percentage of total.
	<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>	
1865....	35,137,000	14.72	48,030,000	20.12	28,777,000	12.05
1866....	60,669,000	13.95	72,482,000	16.67	46,114,000	10.61
1870....	54,081,000	12.41	96,082,000	22.03	55,615,000	12.76
1875....	90,018,000	16.89	113,146,000	21.23	78,892,000	14.80
1880....	100,297,000	15.01	118,125,000	17.69	131,861,000	19.74
1885....	93,346,000	16.16	102,938,000	17.82	106,775,000	18.49
1890....	128,480,000	16.28	133,332,000	16.89	170,637,000	21.62
1895....	141,377,000	19.31	107,026,000	14.63	180,940,000	24.72
1900....	97,916,000	11.52	133,027,000	15.65	276,241,000	32.50

Year.	Manufactures for further use in manufacturing.		Manufactures ready for consumption.		Miscellaneous.		Total value.
	Value.	Percentage of total.	Value.	Percentage of total.	Value.	Percentage of total.	
	<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>
1865	29,902,000	12.52	96,138,000	40.27	760,000	0.32	238,746,000
1866	55,840,000	12.84	198,128,000	45.57	1,577,000	.36	434,812,000
1870	55,569,000	12.75	173,615,000	39.82	996,000	.23	435,958,000
1875	63,411,000	11.89	177,891,000	33.38	9,645,000	1.81	533,005,000
1880	110,779,000	16.59	196,587,000	29.43	10,304,000	1.54	667,954,000
1885	78,255,000	13.55	182,543,000	31.61	13,672,000	2.37	577,527,000
1890	116,924,000	14.81	230,686,000	29.23	9,251,000	1.17	789,310,000
1895	96,487,000	13.18	199,543,000	27.26	6,597,000	.90	731,970,000
1900	134,222,000	15.79	203,126,000	23.90	5,408,000	.64	849,941,000

¹U. S. Bureau of Statistics, *Exports of Manufactures from the United States and Their Distribution, 1800-1906*, p. 26.

A group of imports which remained important throughout the period from 1865 to 1900 was that of foodstuffs in crude condition, such as coffee, tea, cocoa, fruits, and nuts. Their value grew from \$54,081,000 in 1870 to \$97,916,000 in 1900, and during the later eighties and early nineties their value ranged from \$106,000,000 to \$175,500,000 annually. Their relative position fluctuated from 12.4 per cent of the total imports in 1870 to 21.2 per cent in 1892 and 11.5 per cent in 1900. Imports of

foodstuffs partly or wholly manufactured, such as sugar, dried fruits, liquors, wines, and spirits, although greater in value than raw foodstuffs, gradually declined from 22 per cent of the total import trade in 1870 to 15.7 per cent in 1900. Their annual value was subject to great fluctuations. In 1870 it was \$96,082,000 and in 1900, \$133,027,000, but there were many years during the eighties and nineties when it was equal to or greater than the value attained in 1900.

The leading group of imports and the one which advanced with greatest rapidity was that comprising crude materials for use in American industries, such as india-rubber, wool, hides and skins, raw silk, fibers, and uncut diamonds. (See table 59.) The annual value of the imports comprising this group steadily grew from \$55,615,000, or 12.7 per cent of the total, in 1870, to \$276,241,000, or 32.5 per cent of the total, in 1900.

The leading single import was sugar, its annual value advancing from \$55,655,000 in 1870 to \$100,251,000 in 1900. During the same years the value of imported hides and skins grew from \$14,402,000 to \$57,940,000; chemicals, drugs, etc., from \$21,362,000 to \$53,705,000; coffee from \$24,234,000 to \$52,468,000; raw silk from \$3,018,000 to \$41,296,000; cotton goods from \$23,380,000 to \$41,296,000; india-rubber from \$3,460,000 to \$37,793,000; fiber manufactures from \$23,904,000 to \$30,894,000; and silk manufactures from \$23,904,000 to \$30,894,000. The remaining imports of chief importance at the close of the century were as follows, in the order of value: raw fibers, lumber and wood manufactures, iron and steel manufactures, raw wool, fruits and nuts, tin, precious stones and jewelry, woolen goods, leaf tobacco, leather and leather goods, spirits, malt liquors and wines, furs and fur goods, tea, earthen, stone, and china ware, fish and vegetable oils. All of these imports gradually increased, with the exception of iron and steel wares, woolen goods, and tea. Some of the greatest gains were made in those commodities which were produced in tropical and subtropical countries, the value of such imports in 1900 reaching a total of \$325,000,000.

SOURCES OF THE IMPORTS INTO THE UNITED STATES.

The established markets of Europe were throughout this commercial period the principal source of the import trade of the United States, though these markets did not occupy as important a position in the import as in the export trade. In some of the years of the decade preceding the Civil War the imports received from Europe constituted as much as 71 per cent of the total amount of imports, and after the war, in 1866, they still comprised 60.8 per cent of the total. When, however, the basis of the import trade began to shift from manufactured wares to raw materials and foodstuffs, this proportion began to

decline. While in 1900 European countries purchased 74.6 per cent of the total exports of the nation, they supplied but 51.8 per cent of its imports, although the total value of the imports received from Europe slowly increased from \$249,540,000 in 1870 to \$440,567,000 in 1900.

This increase was confined to the countries of continental Europe. The imports from the United Kingdom, although greater than from any other single country, actually rose but slightly from \$155,044,000 in 1870 and \$249,324,000 in 1872 to \$159,500,000 in 1900. The shipments of British cotton, woolen, and linen goods, tin plates, iron and steel wares, and miscellaneous manufactures were confronted by high tariff barriers and by the growth of competing American industries. England was, of course, a broker nation, collecting wares of all kinds from the remote corners of the world and redistributing them. The shipments of diamonds and precious stones, tropical cabinet-woods, ivory, etc., which were received from England gradually increased, but the enlarged volume of this indirect trade was not sufficient to offset the decline in the imports of articles manufactured in Great Britain.

The imports received from northern continental Europe were not as great as those received from the British Isles, but they held a distinctive position in that they almost uniformly increased. The Continent found an American market for a wide variety of wares. The commodities imported from Germany included cotton goods, beet sugar, chemicals and coal tar, machinery, leather and glass manufactures, woolen and silk goods, books, earthenware, cutlery, furs, hides and skins, and a large variety of miscellaneous manufactures. Holland found an American market for diamonds and tobacco, fish, hides and skins, and tin; Norway and Sweden, for fish, hides and skins, iron, and wood pulp; Belgium, for rubber, glass and glassware, diamonds, beet sugar, firearms, furs, chemicals, cement, and fiber manufactures; Denmark, for hides and skins, wool, and similar products; Austria-Hungary, for beet sugar, cotton goods, chemicals, textile fibers, glass and glassware, jewelry, and hides and skins; and Russia no longer exported to the United States chiefly hemp and cordage, but also such articles as hides and skins, wool, licorice root, and manganese.

Almost without exception the imports from these nations reached a higher level immediately after the Civil War than they had occupied before, and then with irregular fluctuations continued to advance. The imports from Germany during these twenty years rose from \$52,211,000 in 1880 to \$97,374,000 in 1900; those from Holland advanced from \$6,944,000 to \$15,852,000; Belgium, from \$11,791,000 to \$12,940,000; Denmark, from \$180,200 to \$920,000; Norway and Sweden, from \$688,900 to \$4,244,000; Austria-Hungary, from \$1,555,000 to \$9,079,000; and those from Russia advanced from \$673,900 to \$7,245,000.

The imports from southern Europe to the United States also grew in volume throughout this entire period, advancing along with the exports from the United States to that section until 1880, and continuing to increase thereafter, notwithstanding the downward trend of the export trade. In 1880 the imports from France were valued at \$69,344,000, and by 1900, though frequently less in value during intervening years, they had risen to \$73,012,000. During the same period the imports from Spain grew from \$5,052,000 to \$5,950,000, Portugal from \$770,000 to \$3,743,000, and Italy from \$10,317,000

TABLE 60.—Imports into the United States of merchandise by continents, 1865-1900.¹

Year.	Europe.		North America.		South America.	
	Value.	Percentage of total.	Value.	Percentage of total.	Value.	Percentage of total.
	<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>	
1865	109,603,000	46.75	83,912,000	35.80	22,931,000	9.79
1866	266,266,000	60.84	109,989,000	25.13	32,137,000	7.34
1870	249,540,000	53.98	126,545,000	27.42	43,596,000	9.41
1875	287,201,000	51.85	132,035,000	23.84	74,247,000	13.40
1880	370,822,000	55.52	130,077,000	19.47	82,127,000	12.30
1885	318,733,000	55.19	117,451,000	20.34	65,290,000	11.31
1890	449,987,000	57.14	148,369,000	18.84	90,006,000	11.43
1895	383,646,000	52.41	133,916,000	18.29	112,167,000	15.32
1900	440,567,000	51.84	130,035,000	15.30	93,667,000	11.02

Year.	Asia.		Oceania.		Africa.	
	Value.	Percentage of total.	Value.	Percentage of total.	Value.	Percentage of total.
	<i>dollars.</i>		<i>dollars.</i>		<i>dollars.</i>	
1865	11,248,000	4.79	3,572,000	1.52	3,166,000	1.35
1866	19,219,000	4.39	7,411,000	1.70	2,618,000	.60
1870	31,413,000	6.78	1,423,000	.31	9,860,000	2.10
1875	45,220,000	8.16	4,982,000	.90	10,219,000	1.85
1880	67,009,000	10.02	14,130,000	2.13	3,789,000	.56
1885	52,200,000	9.04	19,471,000	3.37	4,382,000	.75
1890	67,507,000	8.57	28,356,000	3.60	5,085,000	.42
1895	77,626,000	10.61	17,451,000	2.39	7,164,000	.98
1900	139,842,000	16.45	34,611,000	4.07	11,218,000	1.32

¹U. S. Bureau of Statistics, *Analysis of the Foreign Trade of the U. S. 1895-1905*, p. 138.

to \$27,924,000. South European silks, fruits, wines and spirits, laces, jewelry, argols, sulphur, glycerine and chemicals, cotton and woolen goods, furs, leather, gloves, cork, india-rubber, feathers and downs, earthenware, works of art, and ornaments sought and found an American market. The principal obstacle to the entrance of greater quantities of these wares was the high tariff duties, which, with the exception of a few years, were imposed throughout this period.¹

¹For reciprocal agreements see chap. xli.

The countries of the non-European world in 1900 provided somewhat less than one-half of the total imports entering the United States (48.2 per cent), and their share was very slowly increasing. The imports from many of these countries, consisting mainly of raw materials and tropical and subtropical foodstuffs, were not so generally confronted with hostile American industries and prohibitive tariffs. The progress made, however, was far from universal and was not free from the effects of home competition, high tariffs, and other obstacles to import trade.

From table 60 it is seen that the total volume of imports from each of the non-European continents gradually increased after the close of the Civil War. Relative to the total imports of the country, however, the share received from all North American countries combined was less in 1900 than immediately before or after the war; the proportion coming from South America was no greater in the last decade of the century than during the seventies; and the imports received from Africa were less during the closing decade than during the years 1870 to 1880. The imports from Asia, on the contrary, advanced from 6.8 per cent of the total in 1870 to 16.5 per cent in 1900, and those from Australasia during the same years grew from less than 1 per cent to 4 per cent of the total.

The gains were chiefly in the imports from a few individual countries. Noteworthy increases occurred in the imports from Canada, and during the last decade of the century in the imports from Mexico, in those from Japan, China, Hongkong and the British and Dutch East Indies, Australia and New Zealand, Egypt, and Argentina and Chile.

WIDENED BASIS OF AMERICAN FOREIGN TRADE.

The period 1865 to 1900 was noteworthy not only for the expansion in the variety and volume of imports and exports, for the multiplication of the sources of imports, and for widening the range of foreign markets, but also for the expansion within the United States of the geographical basis of the foreign trade. Before the Civil War the chief source of domestic exports and the leading markets for imports were the regions along the Atlantic and Gulf coasts and the eastern part of the Mississippi Valley, but during this period, as population and industry moved westward, the sources of the foreign trade gradually extended across the entire continent. The acquisition of Hawaii, the Philippines, and Porto Rico opened new regions of American industry and trade even beyond the mainland of the United States, but this occurred so shortly before the close of the century that its effects did not become of appreciable importance until later.

The imports continued to come into the country largely through the ports of the North Atlantic seaboard, but the origin of the import trade had been extended over such a wide area that these ports declined in

rank to some extent. Though the port of New York no longer handled 70 per cent of the country's entire import trade, as in 1860, the value of the imports of merchandise entering that port grew from \$281,000,000 in 1870 to \$537,237,000 in 1900, and at the close of the century still comprised 63.2 per cent of the total. It was from New York that the chief ocean lines continued to radiate to the older as well as the newer markets of the world, bringing to this port a great variety of imported commodities for distribution throughout the country.

The remaining 36.8 per cent of the import trade was divided among a large number of ports. Two other North Atlantic ports, Boston and Philadelphia, handled increased quantities of imports during the years 1865 to 1900, those of Boston amounting in value to \$72,195,000 and those of Philadelphia to \$51,866,000 in the last year of the century, or more than those of any other port of entry except New York.

On the South Atlantic seaboard a readjustment occurred after the Civil War. For a short time the import trade of Baltimore was greater than it had formerly been, but after 1877 it made no further progress during the remainder of the century. The trade of Charleston was severely crippled during the war, and when the center of the cotton-belt later moved westward, her import trade never recovered. In 1900 but \$1,125,000 worth of imported wares entered Charleston. The imports of Norfolk and Richmond likewise declined to a mere trifle, and those of Newport News and Savannah, though not declining, remained small.

New Orleans continued to be the leading port of importation on the Gulf, but the volume of imports handled was no greater than during the decade preceding the Civil War; indeed, its value was less in 1900 than in 1860. The imports entering Galveston, Mobile, and Pensacola were irregular and small in amount. The import trade of all the Gulf ports was sluggish and barely maintained the position attained before the Civil War; its total value in 1900 was \$23,693,000, but 3.3 per cent of the total.

The import trade conducted at the ports of the Pacific coast, though far less valuable than that of the North Atlantic seaboard, was equally flourishing. In 1860 it amounted to but \$7,372,000, but it began to advance immediately after the war, gradually rising from \$16,241,000 in 1870 to \$58,916,000 (or 7.1 per cent of the total imports of merchandise) in 1900. San Francisco became fourth in rank as an importing center, and appreciable gains were made at the Puget Sound ports and at Portland, Oregon. Growing quantities of imports likewise entered through the ports of the Great Lakes and the northern border. While this trade had scarcely begun before the war, it reached the sum of \$59,948,000 in 1900. Smaller but increasing quantities of imports entered at interior ports of entry and at the ports along the Mexican border.

In the export trade there was a redistribution of commerce among the various ports of shipment. As compared with 81.5 per cent of the total import trade in merchandise, the ports of the Atlantic coast in 1900 handled but 69.1 per cent of the total exports of merchandise. The exports of these ports advanced rapidly from \$293,440,000 in 1870 to \$963,569,000 in 1900, but meanwhile the export trade was also growing at many other ports. New York obtained an even greater lead over any other single port than it had before the Civil War, its exports advancing from \$196,615,000 in 1870 to \$518,834,000 (or 37.2 per cent of the entire export trade of the country) in 1900. In addition to the increase in the production of agricultural and other raw materials, the rise of manufactures as exports caused an unusual flow of commodities to the port of New York, from which the leading steamship lines conducted a service to all the principal markets of the world. The position of New York, however, was less dominant in the export trade than in the import trade.

Substantial progress was made in the export trade conducted at Boston, Philadelphia, and Baltimore, the long-standing rivals of New York. Various South Atlantic ports also became large ports of export, notably Savannah and Newport News, and smaller but increasing quantities of exports were shipped from Norfolk (Virginia), Wilmington (North Carolina), and Brunswick (Georgia). The export trade of Charleston fell almost as rapidly as the import trade, and that city soon lost precedence over the other South Atlantic ports in both branches of foreign trade.

The Gulf ports handled 18.3 per cent of the total export trade of the country at the close of the century, their shipments rising from a value of \$146,020,000 in 1870 to \$234,108,000 in 1900. The most rapid progress was made at the port of Galveston, Texas, which before the Civil War was scarcely known. The westward movement of cotton culture gave to this port a cotton trade which during the last decade of the century was barely exceeded by that of New Orleans, and its total export trade advanced from \$14,874,000 in 1870 to \$85,658,000 in 1900. Meanwhile, the exports of New Orleans, though increasing less rapidly than those of Galveston, grew from \$107,500,000 to \$115,859,000, retaining for New Orleans second place as an American port of exportation.

The northern border and Great Lake ports made far greater progress in the export than in the import trade, the value of their exports growing from \$15,043,000 in 1870 to \$104,267,000 in 1900. The export trade of the Pacific coast at the same time advanced from \$14,647,000 to \$170,173,000, 55.9 per cent being conducted at San Francisco in 1900, 24.8 per cent at Puget Sound ports, and 11.4 per cent at Portland. The exports shipped directly across the Mexican border likewise advanced from \$2,213,000 in 1870 to \$22,320,000 in 1900.

THE CARRYING TRADE.

The extraordinary increase in exports and imports during the years from 1865 to 1900 caused a greatly enlarged demand for ocean shipping facilities. As is shown in table 61, the total entrances and clearances at American ports of the shipping engaged in the foreign trade of the United States rose from 18,325,000 tons in 1870 to 56,444,000 in 1900, but the foreign trade conducted in American vessels steadily declined. Not only did the American merchant marine fail to recover from the disasters suffered during the Civil War, but it failed even to maintain the position it held when the war closed. The gross tonnage of the American deep-sea fleet declined from 1,602,583 tons in 1865 to 826,694 in 1900; the proportion of the total foreign trade, in terms of the value of exports and imports, carried in American vessels, fell from 35.6 per cent in 1870 to 9.3 per cent in 1900, and the proportion of the total shipping, in terms of entrances and clearances, declined from 47 per cent in 1865 to 22 per cent in the closing year of the century.

TABLE 61.—*Vessel tonnage and entrances and clearances in foreign trade of the United States, 1860 to 1900.*

Year.	Tonnage of American vessels engaged in foreign trade.	Foreign trade carried in American vessels.		Entrances and clearances of American vessels in foreign trade of United States.	
		Value.	Percentage of total foreign trade.	Tonnage.	Percentage of total entrances and clearances.
	<i>gross tons.</i>	<i>dollars.</i>		<i>gross tons.</i>	
1860	2,546,237	507,247,757	66.5	12,087,209	71
1865	1,602,583	167,402,872	27.7	5,968,795	47
1870	1,516,800	352,969,401	35.6	6,992,967	38
1880	1,352,810	258,346,577	17.4	6,834,319	19
1890	946,695	202,451,086	12.9	8,149,878	23
1900	826,694	195,084,192	9.3	12,344,570	22

¹Compiled from annual reports, U. S. Commissioner of Navigation.

Many forces combined to reduce the American deep-sea carrying trade:

The gradual shift from wood to iron and steel and from sailing-vessels to steamships gave an advantage to foreign ship-owners, especially to those of Great Britain. British ship-builders were able to construct iron and steel vessels at less than the cost of construction in American shipyards, and British ship-owners were consequently favored by lower capital costs. American ship-owners desiring to fly the American flag in the foreign trade were prevented from purchasing foreign vessels for American registry by a statute which had been enacted in 1817 and was not repealed until the year 1912. Considerable American capital was invested in vessels flying foreign flags,

but the vessels under the American flag, being burdened by higher capital costs, found difficulty in competing with foreign ships.

A fundamental reason for the decline in the American carrying trade engaged in the foreign trade was the opening of more profitable fields for investment. Many manufacturing, agricultural, mining, and railroad enterprises attracted investors. The growth in the American coast-wise marine and the investment of American capital in foreign ships indicate that this rise of new enterprises was not solely responsible for the decline in the deep-sea marine. They, however, afforded fields for investment which were more favorable than were American vessels which were obliged to compete with the ships of foreign nations.

As was explained in Chapter XXV, the Civil War resulted in a severe loss in vessel tonnage, and this loss came at a crucial period in the history of the American merchant marine.

Congress for many years did little to promote the American carrying trade: (a) Vessels which adopted foreign flags during the Civil War were refused permission to return to American registry; (b) the heavy war-revenue taxes were retained until 1868; (c) imports of ship-building materials for use in the construction of wooden vessels were not admitted free of duty until 1872 and those for use in building iron and steel vessels not until 1890; (d) liberal mail pay was not provided until March 3, 1891, but three unimportant mail contracts being approved from the close of the Civil War until that year; (e) the American navy was neglected during a period of over twenty years.

The operating costs of American vessels were in many instances higher than those of competing foreign vessels.

Various foreign countries, notably Great Britain, France, Japan, and Germany, encouraged their respective merchant marines by carrying out definite policies of government aid.

CHAPTER XXVII.

THE FOREIGN TRADE IN THE EARLY YEARS OF THE TWENTIETH CENTURY, 1900-1913.

Extraordinary growth in foreign trade, 86. The balance of trade in favor of United States, 87. Changes in nature of exports, 87. Increase in exports of manufactures, 88. Exports of raw materials, 89. The shift from exports of agricultural to exports of manufactured commodities, 89. Changes in the foreign markets for exports, 90. Higher tariffs imposed by foreign countries, 91. Progress made in exports to non-European countries, 91. Changes in the nature and source of imports, 92. Restriction on imports of finished manufactures, 92. Relative progress made by the ports in the export and import traffic, 94. Development of foreign markets for American manufactures, 95. Obstacles encountered and progress made in the competition with foreign manufacturers, 96.

Though the conditions existing during the closing years of the nineteenth century foreshadowed many of the changes which have since occurred in the foreign trade, they did not foretell its extraordinary growth. The annual exports of merchandise grew from a value of \$1,394,483,000 in 1900 to \$1,744,985,000 in 1910, and the import of merchandise from a value of \$849,941,000 to \$1,556,947,000. From 1910 to 1913 the value of the country's exports and imports of merchandise advanced, respectively, to \$2,465,884,000 and \$1,812,978,000, and to the unprecedented aggregate of \$4,278,862,000.

The increase of 25 per cent in the value of exports and 83 per cent in the value of imports during the first decade of the twentieth century and of 76 per cent and 113 per cent, respectively, during the years from 1900 to 1913, was partly due to a general rise in the prices of commodities. The index numbers of the United States Bureau of Labor show an increase of 14.4 per cent in wholesale prices during the decade 1900 to 1910, those of *Bradstreet* 12.6 per cent, those of the *London Economist* 13.7 per cent, and those of Sauerbeck 4 per cent. The average level of prices according to these index numbers advanced approximately 13.5 per cent in the United States and 8.8 per cent in Great Britain. For the period 1900 to 1913 *Bradstreet's* index numbers record an increase of 17 per cent and those of the *London Economist* an increase of 27 per cent. The value of the entire foreign trade of the United States advanced 47.1 per cent during the first decade and 90 per cent during the first thirteen years of the century. If these increases are reduced in accordance with the above-mentioned index numbers so as to eliminate the effect of the rise in prices, it will bring them into substantial accord with the growth in the shipping engaged in the foreign trade. The total entrances and clearances of vessels advanced from 56,444,000 tons in 1900 to 79,942,000 in 1910 and to 101,799,000 in 1913, an increase of 41.6 per cent during the first decade and 80 per cent during the first thirteen years of the century.

The balance of trade in favor of the United States, using the term as it is commonly understood by exporters and importers, was far greater than during any previous ten or thirteen years in the history of the foreign trade, but it was subject to great fluctuations. The excess of exports over imports of merchandise was greatest in 1908, when the mild depression which then afflicted the country caused a decline in imports but did not affect exports unfavorably. From \$666,432,000 in that year the excess of imports fell to \$188,037,000 in 1910, and then rebounded to \$652,906,000 in the fiscal year of 1913. The excess of exports, including gold and silver movements as well as merchandise, fluctuated from \$679,625,000 in 1901 to \$273,330,000 in 1910 and \$691,820,000 in 1913. The term "balance of trade" as used in monetary circles refers to the ability of a nation to import supplies of the precious metals and depends not only upon the excess of exports over imports, but also upon the remittances for interest, tourist expenditures, sums sent to friends, and freight paid to foreign ocean carriers. The net sums sent out of the United States for these purposes in the fiscal year 1909 have been estimated as follows:¹ Interest, \$250,000,000; tourist expenditures, \$170,000,000; remittances to friends, \$150,000,000; freight, \$25,000,000; total, \$595,000,000. The excess of exports over imports in that year was \$410,347,000, leaving a difference of approximately \$184,000,000, which was liquidated by the investment of foreign capital in the United States.

CHANGES IN NATURE OF EXPORTS.

The extraordinary increase in the foreign trade since the beginning of the twentieth century has been accompanied by clearly defined changes in the nature, sources, and markets of the commodities imported and exported. The shift in exports from foodstuffs to manufactures, which became perceptible during the last decade of the previous century, now proceeded with astounding rapidity. The value of food exports, in spite of rising prices, declined from \$545,474,000 in 1900 to \$369,088,000 in 1910, and it was \$502,094,000 in 1913. Relative to the value of all exports they declined from 39.8 per cent of the total in 1900 to a minimum of 19.13 per cent in 1911, and to 20.67 per cent in 1913. There was an abrupt decline in wheat exports from nearly 102,000,000 bushels in 1900 to less than 5,000,000 bushels in 1905, and to 46,680,000 bushels in 1910, and of flour exports from 18,699,000 barrels in 1900 to 8,826,000 barrels in 1905 and 9,041,000 barrels in 1910. The value of the total breadstuffs exported fell from \$262,744,000 in 1900 to \$133,191,000 in 1910. In 1913 breadstuffs were no longer the principal group of American exports, but were exceeded by cotton, iron and steel manufactures, and provisions. The

¹Paish, "The Trade Balance of the United States," in *Publications of National Monetary Commission*, Senate Doc. No. 579, 61 Cong., 2 sess., p. 197.

exports of provisions were more generally maintained, but they also fell from a value of nearly \$184,500,000 in 1900 to \$130,633,000 in 1910, and \$155,666,000 in 1913. The number of cattle shipped abroad fell from over 397,000 in 1900 to less than 25,000 in 1913. The astounding decline in food exports was due to the fact that the domestic consumption of food increased at a more rapid rate than production. The increase in the wheat crop did not keep pace with the growing demand for flour in the United States, and the number of beef cattle in the country steadily declined after 1907.¹

Almost as rapid as the decline in food exports was the growth in the exports of manufactures. With but slight interruptions they rose from a value of \$484,846,000 in 1900 to \$1,186,990,000 in 1913. The conditions of the manufacturing and food-producing industries were completely reversed, the former having a constantly growing and the latter a greatly reduced surplus output. The increase in the output of the leading manufacturing industries and of the minerals upon which they depend was phenomenal. During the decade 1900 to 1910 the output of coal grew from 232,583,000 to over 431,000,000 tons, iron ore from 27,553,000 to 56,889,000 tons, copper from 270,588 to 482,200 tons, and petroleum from 63,338,000 to 209,556,000 barrels. The value of the annual output of the country's iron and steel works and rolling-mills grew from \$597,212,000 to \$985,756,000. The annual output of agricultural implements advanced from a value of \$101,207,000 to \$146,329,000, of cotton goods from \$339,223,000 to \$628,392,000; leather from \$204,038,000 to \$327,874,000; lumber and timber products from \$761,000,000 to over \$1,156,000,000, and refined petroleum products from less than \$124,000,000 to nearly \$237,000,000.

For the prosperity of these and other manufacturing industries the development of foreign markets became a necessity, not merely as a convenient dumping-ground for occasional unmarketed wares, but as a permanent outlet for a portion of the annual output. Iron and steel exports, including an even wider range of wares than was sold abroad during the decade from 1890 to 1900, made the remarkable advance from a value of \$121,914,000 in 1900 to a value of \$304,606,000 in 1913, in the latter year leading in value all other American exports except cotton. During this period, also, the exports of lumber, timber and wood manufactures grew from \$45,578,000 to nearly \$81,000,000; refined mineral oils from \$68,247,000 to \$129,667,000; cars, carriages, automobiles, etc., from less than \$10,000,000 to \$54,586,000; agricultural implements from \$16,000,000 to \$40,572,000, and refined copper and copper products from \$57,852,000 to \$140,165,000. The exports of cotton goods underwent wide fluctuations. They grew from \$24,003,000 in 1900 to nearly \$53,000,000 in 1905, then declined to

¹See chap. xviii.

slightly over \$25,000,000 in 1908, and again increased to \$50,770,000 in 1912, the latest year for which complete data are available. Progress was also made in the exportation of leather and leather goods, naval stores, chemicals, drugs and dyes, rubber goods, and many less important manufactured commodities. Exported manufactures as a whole comprised 48.84 per cent of the country's entire export trade in 1913 as compared with 35.37 per cent in 1900.

Next to manufactures the largest group of exports during the period from 1900 to 1910 consisted of crude materials for use in foreign industries. Contrary to the trend of food exports, the exports of this group of raw products advanced in value from \$325,244,000, or 23.73 per cent of the total export trade, in 1900, to \$713,758,000, or 30.13 per cent, in 1913. The leading raw material was cotton, which regained its position as the principal export of the country. The volume of cotton exports grew from 6,806,572 bales in 1900 to 10,675,445 in 1912 and 8,724,572 in 1913, and its annual value grew from \$241,883,000 in 1900 to \$547,357,000 in 1913. Even though the cotton textile industries of the United States made excellent progress, there was no perceptible increase in the proportion of the total cotton crop retained for home consumption; 66.8 per cent of the crop was exported alike in 1900 and in 1910. Though the annual crop advanced from 10,246,000 running bales in 1900 to over 16,109,000 in 1911 and 14,091,000 in 1912, the prices received gradually rose to a higher level because of greatly increased requirements alike in the cotton mills at home and abroad.

Exports of raw materials also included leaf tobacco. The leaf-tobacco crop rose from 814,345,000 pounds in 1900 to 984,349,000 pounds in 1910, and 953,734,000 pounds in 1913.¹ The quantities shipped abroad increased less rapidly than the total crop, but they advanced from 344,656,000 pounds in 1900 to 418,797,000 pounds in 1913, an increase in value of from \$29,422,000 to \$49,354,000. Raw materials exported also included 20,709,000 tons of coal valued at \$65,000,000 in 1913 as compared with but 7,188,000 tons valued at \$19,500,000 in 1900.

The most significant movement in the entire export trade was the shift from agricultural to manufactured products. Although, as was stated above, there was an increase in the value of agricultural exports from \$844,616,000 in 1900 to \$1,048,434,000 in 1912, this represented a surprising relative fall from 61.6 to 48.3 per cent of the total domestic exports. The Bureau of Foreign and Domestic Commerce has ceased to classify all exports according to their sources, but it reports that during this period the exports of domestic manufactures rose from \$484,846,000 to \$1,020,417,000, and from 35.37

¹Estimate of U. S. Department of Agriculture in the "Agricultural Outlook," *Farmers Bull.*, No. 615, p. 28.

to 47.02 per cent of all domestic exports. In 1913 the agricultural and manufacturing industries were of substantially equal importance in the export trade, while previous to 1900 farm products made up the larger share of the export trade of the United States.

CHANGES IN THE FOREIGN MARKETS FOR EXPORTS.

The shift from agricultural to manufactured commodities brought about a further widening of the range of foreign markets. The exports to Europe increased from \$1,040,000,000 in 1900 to \$1,479,074,000 in 1913. Those to the United Kingdom made but a slight advance from \$533,820,000 to \$597,149,000, but those to Germany rose from \$187,348,000 to \$331,684,000; those to France from \$83,335,000 to \$146,100,000; and rapid progress was made also in exports to Italy. Indeed, the exports to all the principal European countries increased after the close of the nineteenth century, but the progress made in other parts of the world was more rapid, and the proportion of the total exports of merchandise destined to Europe consequently declined from 74.6 per cent in 1900 to 59.9 per cent in 1913. During the last decade of the nineteenth century there had been fear among European producers that Europe would be commercially "Americanized,"¹ but during the early years of the twentieth century it became clear that the commercial struggle between Europe and the United States centered not in the European market, but in the undeveloped markets throughout the remainder of the world. After the close of the last century the imports received from Europe increased more rapidly than the exports shipped from the United States to Europe. While a limited European market for finished manufactures was available, the shipments of manufactures to Europe consisted chiefly of a few standard articles, such as lumber, refined copper, leather uppers, and mineral oil. While 60.87 per cent of the total exports of the United States were destined to Europe in 1912, but 30.76 per cent of the exports of finished manufactures found a market in the Old World. This, moreover, included Russia and other East European countries, which are agricultural, and consequently import large quantities of manufactured wares.

In the markets of western Europe the American manufacturer was confronted by well-established home industries, and in all the leading countries except the United Kingdom and the Netherlands by protective tariff duties. Even before the end of the nineteenth century protection was adopted in continental Europe, one motive of which was to exclude competitive products and another of which was to retaliate against the high rates of the Dingley tariff act. Dual tariff

¹See McKenzie, *The American Invaders*; Stead, *The Americanization of the World*; Vanderlip, *The "American Commercial Invasion" of Europe*.

schedules, especially fitted to meet the requirements of the respective countries, were adopted in France, Spain, Russia, Greece, Norway, Germany, Austria-Hungary, Italy, Switzerland, Belgium, Roumania, Serbia, and Bulgaria. In 1898 a reciprocity agreement was entered into with Switzerland; in 1898 and 1908 with France; in 1900 and 1907 with Portugal; in 1900 and 1909 with Italy; and in 1900 and 1907 with Germany; but the French, Portuguese, and Italian agreements were restricted to a limited number of products, and the Swiss agreement was terminated in 1900. The German agreement was far-reaching and was to some extent responsible for the continued advance of the export trade with Germany; but even the autonomous schedule which it granted to American merchants is at many points highly protective.

As American sales increased, European protection gradually became more stringent. In 1906 Germany enacted a tariff law which materially raised both the general and autonomous schedules of rates on virtually all products imported from the United States except cotton, coffee, cotton-seed oil, turpentine, oil-cake, cement, and certain other articles essential to German industry. In the same year many other European nations heightened the tariff wall against American exports. France raised the rates on dynamo-electric, freezing, hydraulic, and weighing machines, watches, musical instruments, fish, fruits, vegetables, and various other products. Spain granted the minimum schedule to the United States, but raised the rates on electrical and heavy machinery, typewriters, automobiles, hams, lard, and bacon. Austria-Hungary increased her tariffs on grain, flour, iron and steel wares, automobiles, threshing machines, cotton fabrics, fine cotton yarn, hats, shoes, and stoves. Greece still further raised the rates on grain; Switzerland, on leather and shoes, copper, agricultural machines, domestic implements, sewing-machines, tobacco, typewriters, meat products of various kinds, and timber; and Russia on fruits and confectionery. The increases were partly counterbalanced by simultaneous reductions of the rates on various products in Russia, Switzerland, Holland, Norway, and Spain, but in the aggregate the tariff rates in continental Europe on all American commodities which were not essential to European industrial progress were raised.

Western Europe was chiefly a market for cotton, leaf tobacco, wheat, flour, meat products, and other agricultural crops. Of these the first two were shipped in increasing quantities, but exports of the others declined, chiefly because they were needed for home consumption. Western Europe continued to import outside foodstuffs, but was no longer dependent almost solely upon the United States for them. New sources of supply arose, notably in Russia, Australia, New Zealand, India, Argentina, and Canada, where there was a growing surplus of farm products as there had formerly been in the United States.

The exports of merchandise to the foreign markets of North America advanced from \$187,594,000 or 13.5 per cent of the total export trade in 1900 to \$617,413,000 or 25 per cent in 1913. Extraordinary progress was made in Canada, the exports to that country increasing from \$95,320,000 to \$415,449,000, and more extensive markets were also found in Cuba and Mexico. The exports to the Orient advanced slowly and irregularly from \$64,913,000 or 4.66 per cent of the total in 1900 to \$115,057,000 or 4.7 per cent in 1913. Shipments to Oriental markets were at their highest point in 1905 with \$128,500,000, heavy declines having since occurred in the trade with China and Japan. The exports to South America also advanced from less than \$39,000,000 to \$146,148,000 and from 2.8 to 6 per cent of the total export trade. Unusual progress was made in Argentina, and better markets were developed in Brazil, Chile, Peru, and Uruguay. The exports to Australasia advanced from \$43,391,000 to \$79,103,000, but relative to the entire export trade the Australasian shipments made little headway. In 1913 they comprised but 3.2 per cent of the total. The African trade advanced from \$19,469,000 to \$29,089,000, but relatively it too declined from 1.4 to 1.2 per cent of the entire export trade of the United States.

CHANGES IN NATURE AND SOURCES OF IMPORTS.

The imports of the United States after 1900 were greatly influenced by the development and diversification of the manufacturing industries. The need of raw and semi-raw materials for use in American factories and mills caused an unusual increase in the imports of crude materials, notably india-rubber, hides and skins, raw silk, wool, leaf tobacco, fibers, and long-staple cotton, which grew in value from \$276,241,000 in 1900 to \$635,210,000 in 1913 and from 32.5 to 34.9 per cent of the entire import trade of the United States. Manufactures for further use in the manufacturing industries, especially chemicals, unset diamonds, lumber and cabinet-woods, and tin, likewise advanced from \$134,222,000 in 1900 to \$349,401,000 in 1913, and from 15.8 to 19.2 per cent of the total import trade.

On the other hand, the rise of the manufacturing industries and the protective tariff duties, which remained extremely high until the enactment of the tariff law of October 3, 1913, made it increasingly difficult to import finished manufactures. The imports of this group advanced in value from \$203,126,000 in 1900 to \$410,608,000 in 1913, but relatively they declined from 23.9 to 22.6 per cent of all imports. The imports of crude foodstuffs—coffee, cocoa, fruits, and tea—barely maintained their relative position, although their total value advanced from \$97,916,000 to \$211,747,000. Those of foodstuffs, partly or wholly prepared, advanced slowly from \$133,027,000 to over \$194,243,000 in value, but relatively declined from 15.6 to 10.7 per

cent of the entire import trade. Although sugar continued to be the leading single import, its advance from \$100,251,000 to \$103,640,000 indicated a growth which was much less than that in many other branches of the import trade.

There was far less change in the sources of imports during the years 1900 to 1913 than in the markets for exports. So rapid was the increase in the imports received from Europe that the gradual decline in the European ratio which had characterized the nineteenth century was checked; 49.2 per cent of the import trade in 1913 centered in Europe, the annual amount after 1900 varying from 48.4 to 52.6 per cent, as compared with a variation of from 45 to 57.1 per cent during the decade 1890 to 1900. The value of the imports received from Europe advanced from \$440,567,000 in 1900 to \$892,866,000 in 1913, or over 102 per cent as compared with an increase of 42 per cent in the exports from the United States to Europe. Though imports of manufactures as a whole made little progress, the imports received from Europe included many items which increased with marked rapidity, such as laces, gingham, and other textile wares of fine quality, works of art, diamonds, furs, chemicals, tin, cabinet-woods, silk, fruits and nuts, wool and india-rubber. European countries, especially England, and to a less extent Holland, Belgium, Germany, and France, still acted as broker nations in the import trade of the United States. Favored by superior transportation services, colonial possessions, and mercantile and investment connections, they collected wares from distant parts of the world and shipped them to the United States and other markets. More india-rubber came to the United States from Europe than from South America or Africa, more wool than from Australia, more mahogany than from Central America, Mexico, and Africa, and practically all the diamonds received from the diamond fields of South Africa came by way of European countries.

More than one-half of the import trade (50.8 per cent in 1913) came from non-European countries. The greatest progress during the years 1900 to 1913 was made in the imports from North America, which advanced from \$130,035,000 to nearly \$362,000,000, and from 15.3 to 20 per cent of the entire import trade. The imports from Cuba, stimulated by the reciprocity treaty of 1902, increased from \$31,371,000 to \$126,088,000, those from Canada from \$39,931,000 to \$120,571,000, and those from Mexico from \$28,667,000 to \$77,544,000. The imports from South America likewise grew from \$93,667,000 to \$217,735,000 and from 11 to 12.1 per cent of the entire import trade of the United States. Increased quantities of imported wares were received from Brazil, Argentina, Chile, Peru, Colombia, and Venezuela, those from Brazil aggregating \$120,156,000 in the fiscal year 1913. The imports from the remaining grand territorial divisions progressed less rapidly. Those from the Orient rose from \$139,842,000 in 1900 to \$276,495,000

in 1913, but declined relatively from 16.45 to 15.2 per cent of the total import trade of the United States. Those from Australasia grew in value from \$34,611,000 to \$37,543,000, but they too declined relatively from 4 to 2 per cent of the total, while those from Africa rose from \$11,218,000 to \$26,425,000, their relative position remaining substantially unchanged. The imports from Australasia were but 1.4 per cent of the total import trade of the United States in 1913.

The foreign trade in the United States during the years from 1900 to 1913 was more widely distributed among the ports and other gateways of exit and entrance than was true of the foreign commerce during the closing decade of the nineteenth century. As usual, the greatest volume of foreign trade flowed through the large ocean ports of the Atlantic seaboard. The annual imports of these ports advanced from \$693,113,000 in 1900 to \$1,375,850,000 in 1913. Those entering the port of New York advanced from \$537,237,000 to nearly \$1,048,321,000, and comprised 57.7 per cent of all the imports received in the United States. The volume of imported wares also increased at Boston, Philadelphia, Baltimore, Wilmington (North Carolina), Savannah, Norfolk, Perth Amboy, and even at Charleston, where trade had been stagnant since the Civil War. The exports shipped from the ports of the Atlantic increased less rapidly, but they too rose from \$963,569,000 to \$1,348,811,000. Those of New York grew from \$518,834,000 to \$917,936,000, and in 1913 comprised 37 per cent of the entire export trade of the United States. The exports of Savannah, Norfolk, and Wilmington also progressed rapidly, but those of some of the other leading Atlantic ports—Boston, Philadelphia, Baltimore, and Newport News—declined after the beginning of the nineteenth century.

Extraordinary progress was made at the ports of the Gulf coast, their imports advancing from \$23,693,000 in 1900 to \$103,613,000 in 1913, and their exports from \$234,108,000 to \$543,077,000. New Orleans received most of the imports which entered via the Gulf, the annual imports of that port growing from less than \$17,500,000 to more than \$82,250,000. The exports from New Orleans likewise advanced, but they were exceeded by those of Galveston, where the export trade had an astonishing increase from \$85,658,000 to \$281,458,000. Galveston became the second port of exportation in the United States and the greatest cotton-shipping port in the world. Mobile, Pensacola, and Sabine, Texas, also shipped greatly increased quantities of exports, although the imports received by them remained relatively small.

The group of ports third in importance in the foreign trade comprised those of the Great Lakes and the northern border. Because of the rapid growth of the trade with Canada, the imports received through these ports advanced from nearly \$60,000,000 in 1900 to \$153,613,000 in 1913, and the exports shipped through them grew from \$104,267,000 to nearly \$402,000,000. The foreign trade of the Pacific coast also

advanced to a new high level, the Puget Sound ports taking the lead in the volume of exports and San Francisco in the import trade. The exports of all the Pacific coast ports combined grew from \$70,175,000 to \$146,856,000 and their imports from less than \$59,000,000 to \$128,895,000. Meanwhile the exports shipped directly across the Mexican border increased from \$22,320,000 to nearly \$25,000,000, and the imports received in that way from \$5,378,000 to \$27,059,000.

DEVELOPMENT OF FOREIGN MARKETS FOR AMERICAN MANUFACTURES.

The most significant lessons disclosed by the rapidly growing foreign trade of the years 1900 to 1913 were in connection with the development of markets for American manufactures. The sale of such wares in the new and undeveloped markets of the world, as well as in Europe, proved far more difficult than the sale of foodstuffs and raw materials in the established markets of western Europe. At every step the exporters of American manufactured goods encountered vigorous competition by European manufacturers who had regularly shipped their wares to the non-industrial countries of the world during all the years of the nineteenth century, when American merchants regarded those countries chiefly as sources of imports and as dumping-grounds for occasional cargoes which could not be readily sold in the domestic or European markets. However, the improvement in the position of the American exporter as compared with his European rivals, after the close of the nineteenth century, was highly gratifying, especially in some of the newly developed markets. The proportion of the total imports of Canada received from the United States, for example, although England was favored by preferential import duties, advanced from 60.3 per cent in 1900 to 63.4 per cent in 1911. The relative position of American exports in Mexico likewise rose from 50.6 to 53.9 per cent, in Cuba from 44.2 to 52.8 per cent, and in the British West Indies from 26.5 per cent to 42.9 per cent¹ of the total imports of those countries.

In many other markets sought by the American manufacturer, his relative position was distinctly secondary, although the total volume of American wares purchased gradually increased. In Argentina, the leading South American market, the United States furnished 11.8 per cent of the total imports in 1900 and 13.8 per cent in 1910. In Chile the relative share of the United States likewise rose from 9.4 to 12.4 per cent, and in Brazil from 12.5² to 13.0 per cent. In China it advanced from 7.5 to 8.5 per cent, and in British India from 1.7 to 3.8 per cent.³ The relative progress made in these countries was gratifying, but the smallness of the total imports received from the United States is an index of the foreign rivalry which was encountered. In some of the newly sought foreign markets, the share of imports provided by the United States has declined since the close of the nineteenth century. In

¹Year 1910.

²Year 1901.

³Year 1911.

Australia, even though the imports from the United States increased in volume, the American proportion declined from 12.2 in 1900 to 11.6 per cent in 1911, and in New Zealand the decrease in the same time was from 10 per cent to 8.2 per cent. The imports of Japan from the United States likewise declined from 20.9 to 15.8 per cent of the entire import trade of the Empire.

The obstacles encountered in the competition with foreign manufacturers were various. European exporters, having obtained a foothold in the past, could not be easily dislodged and were in a position where they could readily take advantage of trade opportunities. In many instances the more widespread investment of European funds in the countries where markets were sought has been a powerful trade asset. Superior steamship service was a point in favor of European producers, and so was the policy of manufacturing expressly for foreign markets, the establishment of European banks, the policy of direct sales through branch houses, export houses, and salesmen who are acquainted with local conditions, the extension of long-term credit when necessary to make sales, the ability to sell at low prices because of low cost of production, and the policy of careful packing and adherence to specifications. In some markets the political control by European countries has been an obstacle to American traders, for while trade does not blindly follow the flag, yet political control has frequently led to the investment of European funds and to the enforcement of tariffs favorable to the controlling country.

At some points the relative absence of return cargoes was a disadvantage to American exporters. Australia, New Zealand, and Argentina, for example, found an American market for relatively few of their great agricultural exports. Their exports being sold very largely in Europe, it was almost inevitable that large quantities of European wares would be imported.

In China the struggle for markets was made severe by the activities of Japan. Favored by low cost of production, geographical proximity, cheap and effective transportation, and thorough understanding of Chinese trade conditions, Japan became the leader in the foreign trade of China. Since 1905, European as well as American exporters have suffered from the effects of Japanese competition. The rise of the manufacturing industries of Japan, moreover, gradually narrowed the Japanese market for American manufactures, and in 1907 Japan adopted a protective tariff policy which proved to be detrimental to American trade. When the price of raw cotton increased, the Japanese market for American cotton also narrowed, the textile mills of Japan turning more and more to the low-grade cotton of India and China.

Aside from foreign competition, certain obstacles retarded the sale of American exports in the newer markets of the world. The undeveloped condition of some of these countries placed them in strong contrast

with countries having the settled conditions to which the American exporter was accustomed in trading with Western Europe. Brazil and Australia afforded few great markets, because wide stretches of their territory were unpopulated, while in China and parts of Africa, where there was a dense population, the sales were nevertheless restricted because the requirements and purchasing power of the people were limited. Political and military disturbances were an obstacle to uninterrupted trade in countries such as China, Mexico, and the Central American republics. Local difficulties, moreover, sprang up in certain countries, causing temporary trade upheavals. In Brazil, for example, the low price of coffee from 1905 to 1910 prevented many of the people of the Brazilian coffee states from purchasing large quantities of imports. The Chinese policy of restricting the poppy culture, though certain to promote ultimately the welfare of China, caused an abrupt fall in the purchasing power of many of the people of that country, who were deprived of their accustomed means of gaining a livelihood.

American exporters have made much progress since the close of the nineteenth century, and they have profited by their past mistakes. Effective selling organizations have been adopted, especially by some of the large industrial corporations, whose strong financial standing enables them to undergo the costs and risks incident to the development of markets in little-known foreign countries. They have established foreign branch houses, sent out agents, and placed skilled sales managers in charge of their export business. Though many orders continue to be filled through commission houses, the importance of export houses which purchase and sell on their own account has gradually increased in the United States as it has in Europe. A growing number of concerns have undertaken the manufacture of wares expressly for the export trade and abandoned the long-standing belief that foreign market customs can easily be changed to suit the convenience and wishes of the American manufacturer. Efforts have also been made to sell American exports on the same credit terms as those granted by European exporters.

The deep-sea marine of the United States continued up to 1913 in the static condition which prevailed during the last decade of the nineteenth century. Beginning with 1913 there has been a gratifying annual increase in the tonnage of American shipping engaged in the foreign trade, but in 1912 the entire registered fleet aggregated only 932,101 gross tons, it carried but 9.4 per cent of the commodities imported and exported, and constituted but 23 per cent of the shipping which entered and cleared American ports in the foreign trade of the United States. The steamship service between the United States and the newer markets of the world continued to be inferior to the service from Europe, but it was improved to some extent, and further improvement is looked for as a result of the opening of the Panama Canal.

CHAPTER XXVIII.

THE TRADE WITH NON-CONTIGUOUS POSSESSIONS.

Commercial importance of outlying possessions of the United States, 98. The trade with Alaska, 99. The trade with the Hawaiian Islands, 101. The sugar industry of Hawaii, 103. The trade with Porto Rico, 104. Trade of the Philippine Islands under Spanish dominion, 107. The trade of the Philippines since American acquisition, 109. Advance in Philippine trade with the United States, 111. Commercial value of non-contiguous possessions summarized, 112. Statistics of trade between the United States and its non-contiguous territories, 1899, 1900, 1905, 1910, 1913, 114.

The commercial importance of the outlying possessions of the United States has from the time of their acquisition been the subject of much discussion. Opposing views are held as to the usefulness of the possessions, some persons ascribing to these territories almost limitless value as stepping-stones to the foreign markets of the world and as direct sources of trade, while others regard them as politically burdensome and commercially useless. The years which have passed since the last territory was acquired have gone far to demonstrate that the extremists neither among the optimists nor the pessimists were correct in their conjectures.

While the possessions of the United States have not become points of redistribution from which large quantities of American wares are reshipped to surrounding foreign markets, they have become regions having a heavy direct trade with the United States. In the fiscal year 1913 they provided markets for American wares valued at \$108,303,000, and shipped domestic products valued at \$128,207,000 to the United States. As markets for American exports and as sources of needed imports they are exceeded in importance only by Great Britain, Canada, Germany, and France. The annual trade between the United States and these possessions exceeds that conducted between the United States and Japan or China, Cuba, Argentina or Brazil, Australia, Italy, Belgium or the Netherlands.

The trade with the non-contiguous possessions may be conveniently divided into (1) the trade with Alaska, (2) with the Hawaiian Islands, (3) with Porto Rico, and (4) with the Philippine Islands. A small trade has arisen with Guam, Tutuila, and the Midway Islands, but the commercial value of these minor territories has been chiefly in their use as ports of call. Shipments to the Panama Canal Zone during the period of canal building consisted chiefly of materials, fuel, supplies, and foodstuffs for use of the construction forces. Much freight has also been transshipped across the Isthmus by rail, but the entire trade with the Canal Zone has been so completely dependent upon the work of canal construction that it may be omitted from further discussion.

THE TRADE WITH ALASKA.

The first non-contiguous territory acquired by the United States was Alaska. At the time of its acquisition, October 18, 1867, there were not half a dozen prominent men in Congress who spoke in its favor. It was stated on the floor of Congress that "the people of the country do not want these Russian possessions. If submitted to them they would reject the treaty by a majority of millions. Alaska, with the Aleutian Islands, is an inhospitable, wretched, and god-forsaken region, worth nothing, but a positive injury and encumbrance as a colony of the United States."

When this discouraging sentiment prevailed the one article of Alaskan commerce consisted of furs. The Alaskan fur trade had begun long before Alaska was acquired by Russia.¹ After the discovery by the Russian Commander Vites Bering, in 1741, trade was extended to Russia and the fur markets of the remainder of continental Europe and England. In 1787, two Boston trading-vessels procured a cargo of furs in the Oregon country for use in the Chinese trade, and soon thereafter vessels from various Atlantic ports actively engaged in the Alaskan fur trade,² the furs usually being exchanged in China for cargoes of tea, silk, spices and chinaware. The Russian-American Company and the individual merchants of the Atlantic coast drew a large proportion of this early Alaskan trade to the United States.

A new but temporary phase of Alaskan commerce developed shortly after the discovery of gold in California. So great was the demand for supplies in San Francisco that cargoes of old goods which had been held in the warehouses of the Russian-American Company for decades were disposed of at fabulous prices. In exchange for corn, dried beef, and tallow, Alaska provided the California gold-seekers with Russian tools, implements, ironware, and salt fish. However, the only permanent branch of Alaskan trade prior to the discovery of gold in Alaska, and for more than fifteen years after the annexation to the United States, was the fur trade. It is estimated that during the first twenty-two years subsequent to annexation, furs valued at over \$48,500,000 were exported. In more recent years the fur trade has declined because of the ruthless destruction of the fur-bearing animals, which formerly abounded, until in the fiscal year 1913 the entire receipts of Alaskan furs in the United States amounted in value to but \$751,000.

Alaskan commerce since the decline of the fur trade has depended chiefly upon two great industries—the gold mines and the fisheries. Gold was first found in southwestern Alaska in 1863, that district being later developed with Ketchikan as the supply center in the south and Juneau holding a similar position in the north. A second gold district came into prominence in 1883 on the upper Yukon—Dawson City, the

¹Bancroft, *History of Alaska*, 97.

²U. S. Census 1890, *Alaska*, 243.

Klondike, and the surrounding region, located partly in Alaska and partly in Canada, focusing the attention of the entire world. A third large district was discovered in 1898 in the vicinity of Cape Nome. Since then gold-mining has continued throughout each of these districts and some of the metal has been found in many other parts of Alaska. An irregular volume of Alaskan gold continued to come into the United States even after the gold craze had subsided. Not until recently has the annual Alaskan gold output been estimated with a reasonable degree of accuracy; hence detailed comparisons with the past can not be made. The United States Geological Survey estimates that since 1905 the annual output has varied from \$15,667,000 to over \$22,000,000. Moreover, large quantities of gold have been shipped to the United States from the Canadian gold-fields lying beyond the boundaries of Alaska. In 1912 the United States received from Alaska a total of \$20,733,000 in gold and silver, \$17,491,000 coming from the gold-fields of Alaska and \$3,242,000 from those located adjacent to Alaska.

Though occasional shipments of Alaskan fish were made during the old fur-trading era, the Alaskan fish trade, which later became so important, had its real beginning with the establishment of the salmon-canning industry at Sitka in 1878. Its success was so marked that salmon canneries were later erected at various points along the entire coast from the southern peninsula throughout the Aleutian Islands to Bristol Bay and Bering Sea. The value of the annual output of the Alaskan canners has in recent years ranged from \$10,000,000 to over \$16,000,000. The value of the shipments of Alaskan salmon to the United States in 1913 amounted to nearly \$17,000,000, and the total shipments of all varieties of Alaskan fish were valued at nearly \$18,000,000.

Aside from gold and fish, but few Alaskan products have been shipped to the United States since the decline of the fur trade. The extensive copper deposits have remained almost untouched. It is only since 1910 that appreciable quantities of Alaskan copper have been shipped to the United States, the shipments in 1912 being valued at \$5,000,000 and in 1913 at \$3,500,000. The vast deposits of Alaskan coal have remained untouched on account of the lack of railroads and the policy of the United States Government regarding the establishment of coal claims.¹ Indeed, Alaska has imported coal from Seattle and British Columbia. The Alaskan forests of cedar and Sitka spruce have likewise been for the most part left uncut, Washington and Oregon lumber valued at \$400,000 to \$500,000 being annually imported.

The total shipments of merchandise from Alaska to the United States has slowly risen from a value of \$10,635,000 in 1903, when accurate records were first kept, to \$24,000,000 in 1913. As late as 1911 the entire shipments of merchandise were valued at less than \$12,000,000. The shipments of all Alaskan products to the United States, including gold and silver, have increased from \$15,750,000 to

¹In 1914 provision was made for the construction of a Government railroad in Alaska.

\$38,750,000 during the period 1903 to 1913, while the receipts of foreign gold from Alaska have declined from \$11,000,000 to \$4,250,000.

The Alaskan market for American wares has gradually broadened, but has always been small. The shipments to Alaska have risen from less than \$9,500,000 in 1903 to \$20,180,000 in 1913. It is only since 1898, when goods valued at \$13,667,000 were shipped to Alaska, that a market of any consequence has been found. During the entire period 1880 to 1905 the shipments ranged from less than \$500,000 to \$3,000,000 annually. Alaska has been a market chiefly for iron and steel wares, breadstuffs, provisions and eggs, explosives, woolen and cotton goods, liquors, tobacco, mineral oils, vegetables and fruits, lumber, and boots and shoes. The nature of Alaskan industries has been such that the greatest flow of products has necessarily been outward rather than inward. Moreover, while the area and resources of Alaska are large, the population has always been so small that no extensive purchase of American exports has been possible. In an area of nearly 591,000 square miles there were but 63,600 inhabitants in 1900, less than 64,300 in 1910, and approximately 64,500 in 1912, the white population comprising less than one-half of the total. Not until railroads are constructed, and the coal, copper, and other mineral and lumber resources are opened for development, is it likely that there will be a large Alaskan market for American exports.

THE TRADE WITH THE HAWAIIAN ISLANDS.

Of greater direct value to American commerce than Alaska are the Hawaiian Islands, which became an American possession in August 1898, and were organized as a Territory in 1900. In addition to their services as a coaling-station, as a port of call for some of the merchant vessels plying between the Pacific coast and Australia, New Zealand, and the Orient, and as a naval station, the Hawaiian Islands have been a factor of no little importance in the commerce of the United States. The shipments of domestic merchandise between the United States and these islands in the fiscal year of 1913 were valued at \$73,064,000, which was considerably more than the value of the trade with any other outlying possession.

The history of the commercial relations between the United States and Hawaii may be divided into three main periods: (1) the sandalwood era, (2) the era of whaling ships, and (3) the sugar-trade era.

The Hawaiian sandalwood trade of the past was largely the outgrowth of the trade with the Oregon country and China.¹ In 1786 a merchant of Boston formed a stock company to engage in the western fur trade, and its two vessels, after obtaining a quantity of Oregon furs, proceeded to Hawaii and other Pacific Islands in 1787 to secure a

¹See Carpenter, *America in Hawaii*, 29-35; Jarvis, *History of the Hawaiian Islands*, 68-79; Blackman, *The Making of Hawaii*, 187.

supply of sandalwood with which to complete their cargoes. Other adventurous merchantmen soon followed this example, and a lucrative trade in sandalwood was established. The common course of trade was to obtain a supply of furs on the Pacific coast, then to complete the cargoes with sandalwood obtained from the Hawaiian native chiefs in return for firearms, ammunition, liquor, hardware, cotton, woolen and linen cloth, and trinkets, and to proceed to China, where the furs and sandalwood were exchanged for silks, teas, chinaware, and spices, which in turn were sold in Europe and the United States.

Though the chief Hawaiian product during the first period was sandalwood, after 1800 small quantities of other products, such as pearls, cocoanuts, and vegetables, were bought from the natives; and in addition to the customary articles for barter, occasional shipments of horses were made to Honolulu from Boston and California. In 1790 England broke the Spanish monopoly of the trade of the Pacific and thereafter the trade both of England and America with the Hawaiian Islands was firmly established. During this early period, moreover, Honolulu was developed into a port of redistribution.¹ For many years the trade of the Spanish-American possessions—Mexico and California—was closely restricted to Spain, and foreigners seldom traded there except as smugglers. The practice of American merchants was then to collect cargoes of American and Chinese products at Honolulu in order that they might be smuggled thence into Mexico and California, when the opportunity arose, and be exchanged for hides, furs, coin, and live-stock.

The supply of sandalwood, however, because of the wasteful exploitation by the native chiefs, was soon so seriously reduced that the direct trade with Hawaii would speedily have disappeared, had not a new trade basis been found in the harboring of the Pacific whaling fleets at Honolulu. As early as 1823 it was not uncommon to find from 40 to 60 American whale-ships at Honolulu. At first they entered the harbor for shelter, recruits, repairs, and provisions, but later many of them unloaded their oil and transshipped it to the United States in merchant vessels. The additional cargo which this provided to the merchantmen was sufficient to cause them to continue their Hawaiian trade, and their frequent arrival soon resulted in the appearance of other Hawaiian products to supersede sandalwood. Moreover, the vessels now returned to the United States directly with their cargoes without proceeding to China. They brought to the United States, in addition to whale-oil, cargoes of hides and skins, salt, tobacco, tallow, mustard seed, wool, and an assortment of miscellaneous products. The chief American products exported to the islands were miscellaneous staple goods and groceries from the Atlantic ports, lumber, spars, and salmon

¹Alexander, *The Relations between the Hawaiian Islands and Spanish America in Early Times* (papers of the Hawaiian Historical Society, No. 1, 1892).

from the Columbia River, live-stock from California, and specie and bullion from Mexico. About one-half of all the imports of Honolulu were from the United States, one-fourth from China, California, and Oregon, and the remainder chiefly from England, Mexico, and Chile. Toward the end of this period the United States and England became the principal rivals in the Hawaiian trade.

The third period of trade with Hawaii began in 1853, when sugar-growing became an important industry in the island. Though sugar cane is indigenous to the Hawaiian Islands, the first establishment for making sugar was not erected until 1825. Others soon followed, but sugar did not become the chief article of export until the early fifties, the lack of available capital and the difficulty of finding a market because of the American protective tariff preventing a rapid growth of sugar culture. The remedy was found in the Hawaiian reciprocity treaty of 1876, which placed sugar and practically all products of the Hawaiian Islands upon the free list, in exchange for like privileges for practically all American wares seeking a market in the islands.

Commercially, the treaty, which was renewed with but slight changes in 1887, and which continued until the date of annexation, at once caused a rapid extension of the sugar industry. Oriental coolies were imported as laborers, and much American capital was invested. Indeed, many of the sugar plantations, both old and those newly established, came to be owned and controlled by American citizens. Immediately after the ratification of the treaty, shipments of Hawaiian products to the United States increased from \$1,376,681 in 1876 to \$2,550,355 in 1877, and the shipments from the United States to the islands increased from \$662,164 to \$1,272,949. The clause in the treaty which prevented Hawaii from granting similar tariff favors to foreign nations and the great market for sugar which was available in the United States, after tariff barriers were removed, placed an increasing proportion of the total commerce of Hawaii under American control. Immediately before annexation 99.6 per cent of all Hawaiian exports were shipped to the United States and 76.9 per cent of the total imports consisted of American products.

The building up of the sugar industry placed the commerce of Hawaii upon a sound footing, and both the shipments and receipts of Honolulu steadily increased. The shipments of Hawaiian products to the United States grew from a value of \$17,831,000 in 1899 to \$55,056,000 in 1912 and \$42,652,000 in 1913. The extent to which sugar dominated Hawaiian commerce is indicated by the fact that during the two years 1912 and 1913, 90 and 86 per cent, respectively, of all the imports received from the islands consisted of sugar. Over 1,000,000,000 pounds annually of Hawaiian raw sugar have in recent years been imported by the sugar refineries of the United States. The remaining receipts have consisted chiefly of refined sugar, canned pine-

apples, coffee, rice, molasses, and hides and skins. The shipments of American wares to Hawaii have been less in volume, but they, too, have been advanced from a value of \$9,007,000 in 1900 to \$30,412,000 in 1913. These shipments consist of a wide variety of iron and steel wares, mineral oils, meat products, breadstuffs, lumber, cotton goods, wines, tobacco, and canned salmon.

While the shipments from the United States have in recent years been largely from the Pacific coast, the receipts from Hawaii have been about equally divided between the Pacific and Atlantic seaboard. Foreign competition has been relatively slight ever since the adoption of the reciprocity treaty, and it has almost disappeared since the annexation of the islands, which removed the last vestige of the tariff on the trade between Hawaii and the United States, excluded all foreign vessels from this trade, and made the islands a part of the United States, politically as well as commercially. In 1913 the exports from Hawaii to foreign countries aggregated but \$740,000, and the imports from foreign countries totaled \$6,800,000. Japan has in recent years been the only foreign country to find a substantial Hawaiian market, the remaining imports from abroad having come principally from India, England, Germany, Scotland, Chile, Hongkong, Australia, and the Dutch East Indies.

THE TRADE WITH PORTO RICO.

As a result of the war with Spain, the United States, on December 10, 1898, acquired an important island possession in the Atlantic Ocean. Located in the midst of the West Indies, on a fairly direct route from the Atlantic and Gulf seaboard of the United States to South America, and from Europe to the Panama Canal and various foreign West India ports, Porto Rico has a promising commercial outlook. The direct trade of the United States with Porto Rico is greater than that with any other outlying possession except Hawaii, and in recent years it has increased with greater rapidity than the trade with any other American dependency. The total value of the domestic wares exchanged in the fiscal year of 1913 was \$72,753,000.

The history of the commerce between Porto Rico and the United States, while the former was under Spanish dominion, covers an exceedingly long and uninteresting period. There were numerous shipments between the American Colonies and San Juan, but they were a minor factor in the great West India trade, in which the Colonies had engaged ever since the beginnings of American foreign commerce. Spain controlled the government of Porto Rico for three hundred and fifty years, during which time the usual trade restrictions were applied in all their accustomed forms, so as to keep Spanish trade for Spain. As early as 1614, for example, it was decreed that, though the tobacco culture was permissible, no tobacco might be sold to foreigners "under penalty of

death,"¹ and in 1777 and 1784, again, exceedingly harsh restrictions were imposed, some of which were so burdensome that obedience at all times was out of the question. Toward the end of the Spanish rule there were but few laws which retarded the importation into the United States of native products from Porto Rico, but the discriminating tariffs of Spain continued to be an obstacle in the path of the American exporter. Though the inhabitants of Porto Rico, unlike those of the other southern colonies of Spain, were generally peaceful and not addicted to revolutions, the material progress of the island was slow.² Both the import and export trades of the United States with Porto Rico during the Spanish epoch experienced violent fluctuations. American exports to the island in 1855 were valued at \$1,145,000, and in 1865 at \$3,513,000, a value not exceeded until the final break from Spain, while in 1897, immediately before the Spanish war, they amounted to but \$1,965,000. The imports from Porto Rico experienced similar fluctuations, but were usually much in excess of the export trade. In 1855 the United States imported Porto Rican products valued at \$2,476,000, in 1860, at \$4,513,000, and in 1872, at \$11,328,000, the maximum prior to the acquisition of the island. In 1897 the value of the imports from Porto Rico into the United States was but \$2,181,000.

After Porto Rico became an American colony in 1898, the commercial situation changed in three important respects:

(1) The trade between the island and the United States underwent a marked increase. Almost without interruption the shipments of American wares to Porto Rico increased in value from \$4,261,000 in 1900 to \$32,223,000 in 1913; and the shipments of domestic products of Porto Rico to the United States during the same period advanced from \$3,079,000 to \$40,530,000. This rapidly growing trade has been conducted largely between four ports—New York and New Orleans in the United States, and San Juan and Ponce in Porto Rico. Ports of minor importance have been Boston, Galveston, Philadelphia, Mobile, and Sabine, Texas, the trade being more widely scattered in the later years. It has been conducted exclusively in American vessels, for the Porto Rican trade has been included in the coastwise trade of the United States.

(2) The commodities comprising the Porto Rican trade have changed in rank since the island became an American Territory. In 1899, according to the first census of Porto Rico, 41 per cent of the cultivated land produced coffee, 15 per cent sugar cane, 14 per cent bananas, 8 per cent sweet potatoes, 4 per cent Indian corn, 2 per cent malangas, 2 per cent rice, 1 per cent coconuts, and 1 per cent was devoted to tobacco. Half a decade later, however, the productive system of the island was very different: "The crisis in the coffee industry, which brought about

¹van Middeldyk, *The History of Puerto Rico*, 222.

²*Census of Porto Rico, 1899*, pp. 13-17.

this reversal, was due to over-production induced by previous high prices, partial loss of the Spanish market owing to the imposition of high duties, partial loss of the French market for a similar reason, the change in the money standard, and the hurricane of August 8, 1899."¹ No sooner was the commerce between Porto Rico and the United States declared to be domestic trade than the sugar culture began to flourish, for it meant that sugar was now on the American free list and had before it the immense sugar market of the United States. The coffee trade was not similarly stimulated because coffee had previously been on the free list. Indeed, the imports of Porto Rican coffee lagged for a full decade, no increase occurring until 1910. The cultivation of rice has been greatly diminished, it proving to be a less profitable crop than sugar, and many of the lowlands on which it was formerly grown were utilized for the cultivation of sugar. In 1913 rice valued at over \$5,000,000 was imported from the United States. Tobacco, on the contrary, growing on the highlands, again became an important crop, and much progress was made in the cultivation of Porto Rican fruits.

The increase in the shipments to the United States has depended chiefly upon sugar, the value of sugar imports from Porto Rico rising from \$2,449,000 in 1900 to a maximum of \$31,544,000 in 1912. The remaining imports from Porto Rico in that year consisted chiefly of coffee, cigars, pineapples, oranges, grapefruit, and coconuts.

The leading exports of American products to the Porto Rican market have consisted of breadstuffs—principally rice and flour—cotton goods, iron and steel wares, meat products, lumber, leather goods, and mineral oils.

(3) A large and growing proportion of the commerce of Porto Rico has been controlled by the United States.² In 1830, 27 per cent of the imports of Porto Rico came from the United States; in 1895, 23 per cent; and in 1899, 40 per cent, as compared with 88 per cent in 1906 and 82.5 per cent in 1913. Likewise in 1830, 49 per cent of the total exports of the island were sent to the United States; in 1895, 19 per cent; and in 1899, 34 per cent, as compared with 85 per cent in 1906, and 90 per cent in 1913. Spain, Cuba, France, the British East Indies, Germany, England, Austria, and Canada continued to conduct a small share of the Porto Rican trade, but they were unable to withstand the advantages which the application of the American tariff laws to the foreign trade of Porto Rico, the local establishment of American merchants, the investment of American capital, and the large American market for sugar, tobacco, coffee, and fruits gave to the United States.

¹U. S. Department of Commerce and Labor, *Commercial America in 1905*, p. 37.

²U. S. Department of Commerce and Labor, *Commercial Porto Rico in 1906*, p. 47; *Commercial America in 1905*, p. 38; *Monthly Summary of Commerce and Finance, April 1900*; van Middeldyk, ch. 34; U. S. Bureau of Insular Affairs, *Report of Chief*, 1913, p. 16.

As a part of the United States, Porto Rico has prospered. Trade restrictions have been lessened, a stable government has encouraged capitalists to develop the island's industries, and the control of the hook-worm disease and the other sanitary triumphs of the government have added to the energy and productive activities of the people.

THE TRADE OF THE PHILIPPINE ISLANDS UNDER SPANISH DOMINION.

In the discussion of territorial expansion the attention of the United States has been usually centered largely upon the Philippine Islands. Their geographical location is entirely different from that of the other important island possessions, their trade with the United States has been less, their trade and shipping have been subjected to different regulations, and the islands have been differently governed. Though much commercial progress has been made since December 1898, when the Philippines became an American colony, vastly greater obstacles were encountered than in Alaska, Hawaii, and Porto Rico.

Though a trade of primitive barter had been conducted between the merchants of China and Japan and the natives of the Philippines from "time immemorial,"¹ the trade with Europe did not begin until after 1521, when Magellan discovered the islands and claimed them for Spanish territory. There was scarcely any trade even with Spain until the founding of Manila in 1571, and for many years European nations other than Spain could not trade, except secretly through Siam and India and with Asiatics in command of their vessels.

The first commercial importance of Manila was as an Oriental center of redistribution. From within a year after the founding of the colony by Spain to the second decade of the nineteenth century a trade was conducted between Manila and Mexico, Guatemala, Panama, and Peru.² The Philippines were but a link in the trade of Spain with Spanish America. The Spanish-American trade center was Acapulco, Mexico, the Oriental center was Manila, and the only legitimate trade between them was conducted in the state galleons of Spain. Though the Spanish subjects at Manila were prohibited from purchasing wares on the Asiatic mainland, they were permitted to buy such cargoes as were brought to them, and consequently Chinese junks came to Manila, while frequent cargoes arrived from Japan, Siam, India, and Persia. The cargoes obtained in this way were then in many instances carried to Spanish America in Spanish state galleons and exchanged for Mexican coin. Mexican dollars were scattered throughout the Orient on a large scale and they became an index of the importance of Manila as an Oriental trade center. "For two centuries a steady stream of these coins flowed through Manila at the rate of from 250,000 to 3,000,000 Mexican dollars per annum into her commercial connections."³

¹*Census of Philippine Islands*, 1903, I, 346.

²Foreman, *The Philippine Islands*, ch. 15; *Census of Philippine Islands* 1903, I, 347; *Official Handbook of the Philippines* (Bureau of Insular Affairs pt. i, 247.

³Plehn, "Foreign Markets," in *Journal of Political Economy*, XIII, 1905, p. 19.

As the Philippine trade became greater, it was, at the suggestion of the envious merchants of Cadiz, subjected to severe restrictions by the Spanish Government. Many of these restrictions were maintained for a long period of time, the prohibition of the exportation of China silks to Mexico, for instance, not being removed until 1734. But even for another century, after the abolition of these burdensome regulations, the trade of Manila was, with few exceptions, limited to Spanish merchants. A French firm was given commercial rights at a comparatively early date, and similar privileges were extended to an English house in 1809, but foreign trade as a whole was small, even the Mexican trade being cut off by the declaration of Mexican independence in 1821. It was not until 1834 that the port of Manila was unrestrictedly opened to foreign merchants for trading purposes, and even then American as well as European merchants were at a disadvantage. In 1844 strangers were excluded from the interior of the islands; in 1857 an attempt was made to prohibit foreigners from establishing themselves in the colony; and throughout the entire period of Spanish dominion discriminating tariffs were levied upon foreign goods, and the duties on merchandise in foreign vessels were double the usual Spanish tariff rates.

The direct trade between the United States and the Philippines began about 1796, when one of the ships of the great Salem merchant, Derby, entered the harbor of Manila and obtained a cargo of sugar, pepper, and indigo.¹ In spite of all restrictions this trade continued, and, after the value of Manila hemp, tobacco, sugar, dyewoods, and other native products was discovered, the trade spread to other Atlantic coast ports. The customs records of the United States state the value of the imports from the islands in 1822 to have been \$234,568, and show that they steadily increased until 1857, when the value was recorded as \$3,653,763. Thereafter the import trade was irregular for more than a decade, but by 1872 it had increased to \$7,781,629. Then there was another long period of irregular trading, the highest figure, until the beginning of American control, being that for the year 1884 (\$12,339,531) and the lowest that for 1897 (\$4,383,740). The value of the American wares exported to the Philippines has always been decidedly less than that of the Philippine products which were imported. In 1830, according to the American customs records, the value of the exports to the Philippines was but \$39,129, in 1845, \$119,263, and in 1850, \$16,817. In 1860 the United States marketed products in the islands valued at \$364,608, and after the Civil War the trade continued with great fluctuations until the end of Spanish dominion, the maximum being reached in 1872 (\$334,398).² As was usual in the early Oriental trade of the United States, payments were made in specie rather than in American merchandise.

¹Marvin, *American Merchant Marine*, 204.

²Includes various other Spanish possessions.

During the earliest period of Philippine commerce practically the entire trade was with Spain and the Oriental countries, but after the opening of Manila in 1834 Spain gradually lost control.¹ By 1855 Manila found her chief markets in the United States, England, Spain, China, and Australia, and twenty years later Spain, China, and Australia had lost ground, while the United States and England had gained and the British East Indies had become an important factor. During the decade preceding 1898, England was the chief customer of the Philippines, the United States, China, Spain, the East Indies, Japan, and France being of less importance. The purchases of the United States were gradually declining. The exports of merchandise to the Philippines from the United States were uniformly unimportant before the acquisition of the islands. Philippine imports were controlled mainly by Great Britain and Spain, while Germany, France, China, Japan, and the East Indies all made greater sales than the United States.

THE TRADE OF THE PHILIPPINES SINCE AMERICAN ACQUISITION.

The trade of the Philippine Islands, since they became an American colony in December 1898, has had to overcome many serious obstacles. Being largely dependent upon the agricultural resources of the islands, it has been adversely affected by the many temporary setbacks which have retarded agriculture. In some districts 70 to 90 per cent of the native carabaos, the Philippine oxen, were destroyed by the ravages of war and the "rinderpest;" war also damaged the irrigation works, roads, and farm implements, and for some years there was an insufficient supply of loanable capital, the usual rate of interest to farmers during the first half dozen years of American occupation ranging from 15 to 20 per cent. The land tax, moreover, was unpopular with the Philippine landholders, and wages during the first five years rose from 100 to 150 per cent, whereas the price of farm produce, with the exception of rice, which was largely consumed by the natives, did not rise correspondingly.

The trade of the Philippines, moreover, was subjected to tariff regulations quite different from those applied to the trade of other American colonies. Until 1902 the tariff rates applicable to foreign countries were applied to the trade between the Philippines and the United States, and not only were Philippine exports obliged to pay import duties in the United States or abroad, but in addition certain export duties imposed by the Philippine Commission. On March 8, 1902, Congress enacted a special act which continued the payment of the regular Philippine tariff rates on imports from the United States, but permitted Philippine wares to enter the United States at tariff rates equal to 75 per cent of the duties collected on imports from foreign countries,

¹*The Commercial Philippines in 1906*, p. 33.

and less any Philippine export duties imposed upon shipments from the islands. The act also exempted from the payment of export duties all Philippine wares entering the United States free of duty and coming directly from the islands.

The trade between the United States and the Philippines was not restricted to American vessels, but American ships arriving at American ports from the Philippines were not required to pay tonnage taxes. An act of April 29, 1908, required foreign vessels entering an American port from the Philippines to pay the same tonnage taxes as were paid by vessels entering from foreign countries.

The first far-reaching modification of tariff duties applicable to the trade between the United States and the Philippine Islands was made in the Payne-Aldrich tariff act of August 5, 1909. It provided that American products (except rice) should be admitted into the islands free of duty, provided that no drawback of customs duty had been allowed, that they had been shipped direct, or in bond through Canada or Mexico, and that a properly executed certificate of origin had been presented. It also provided that Philippine products (except rice) should under the same conditions be admitted into the United States free of duty. It specified, however, that the annual imports of Philippine cigars should be limited to 150,000,000 cigars; wrapper and filler tobacco when mixed with over 15 per cent wrapper tobacco to 300,000 pounds; filler tobacco to 1,000,000 pounds; sugar to 300,000 gross tons; and that not more than 20 per cent of the value of imported Philippine manufactures should consist of foreign materials. At the same time the so-called "Colton Act" revised the Philippine tariff act of March 3, 1905, which governed the collection of duties imposed in the islands.

The tariff act of October 3, 1913, further extended the principle of free trade to the commerce between the United States and the Philippine Islands. It removed the limit on the amount of Philippine tobacco and sugar which might be shipped to the United States; it repealed the provision which excepted rice from the free-trade regulations of the Payne-Aldrich act; and it permitted cargoes entitled to free entry to be shipped on a through bill of lading instead of limiting them to direct routes. Though stimulating the trade between the United States and the Philippines, the act of 1913, by abolishing all export duties on articles shipped from the islands, also benefited the trade with foreign nations. The Payne-Aldrich act practically granted a differential to the American importer in that it abolished the export duties on goods entering the United States free of duty and did not prevent the collection of such duties on exports destined to foreign countries.

The modified free trade within certain limits which the Payne-Aldrich act extended to the trade between the United States and the Philippines, together with improvements in agriculture, transportation, currency, and other fields of Philippine industry and finance which had gradually been worked out, resulted in the first rapid advance in the

commerce of the islands after their establishment as an American colony. Shipments to the United States advanced in value from \$4,410,000 in 1899 to \$11,373,000 in 1903, but then remained static for six years. Shipments from the United States to the islands gradually advanced from \$2,636,000 in 1900 to \$11,182,000 in 1903, but the increase was largely due to the purchases of commodities intended for consumption by Government troops and public servants stationed in the islands.

Since 1909 the trade between the United States and the Philippines has made rapid progress. Shipments to the United States advanced to \$17,318,000 in 1910 and \$21,010,000 in 1913, and the imports received from the United States grew to \$16,769,000 in 1910 and to \$25,361,000 in 1913. In return for cargoes of manila hemp, sugar, cigars, leaf tobacco, and copra, the United States has shipped a multitude of American exports of much the same kind as those shipped to the Hawaiian Islands.

The imports into the United States from 1900 to 1909 consisted very largely of hemp, together with declining quantities of sugar. The shipments of tobacco and sugar had begun to decrease in relative importance even under Spanish rule, and owing to the devastation by insects and disease, the exports of coffee had practically ceased. Since 1909 the hemp trade has lagged, while the sugar, cigar, leaf-tobacco, and copra trade has gradually increased. In 1910 the prices of all these commodities, except hemp, increased, and the condition of the hemp industry has therefore been unsatisfactory. It should also be noticed that, owing to the change in prices, the increase in the volume of Philippine shipments to the United States was less rapid than the advance in their value.

The relative share of the United States in the Philippine trade gradually advanced, after the islands became an American colony, although it has never become as preponderant as in other outlying possessions. While prior to American occupation the United States had for many years been losing ground, the share of the United States in 1905 comprised over 44 per cent of the entire export trade. From then until 1910 the shipments alike to the United States and foreign countries lagged, but since 1910 the shipments to the United States, as well as those to other nations, have made much progress. In 1913 the Bureau of Insular Affairs reported that 63 per cent of all Philippine exports found markets in foreign countries. The relative position of the United States in the Philippine import trade has steadily improved, since the islands became an American dependency. Before the American occupation of the islands, the imports received from the United States averaged from 2 to 4 per cent of the total; those from Great Britain, from 25 to 38 per cent; from Germany, 3 to 6 per cent; Spain, 8 to 24 per cent; China, 10 to 20 per cent; and those from Hong-kong and the British East Indies ranged from 10 to 25 per cent. During

the years 1900 to 1905 the American share averaged about 13 per cent (19 per cent in 1905), while the imports from Great Britain averaged about 17 per cent, Spain, 7 per cent, China, 13 per cent, Hongkong, 5 per cent, and the British East Indies 8 per cent, the latter gradually rising to 15 per cent, when a shortage in the Philippine rice crop occurred. In 1913 the imports from foreign countries comprised about 55 per cent of the total import trade of the islands, the share of the United States having risen to nearly 45 per cent. It was not expected that the trade of the Philippine Islands would be so completely dominated by the United States as that of Alaska, Hawaii, and Porto Rico, because the large Oriental population guaranteed a market for substantial quantities of Oriental wares, and the geographical proximity of the islands to Asia and Australia made them a natural market for Australian provisions and breadstuffs and South Asiatic rice.

The commercial value of the Philippines has been almost entirely as a source of direct trade. The building of adequate docks, depots, and warehouses, and the general improvement of harbor facilities has not restored Manila to its former position as a port of redistribution. Many forces have been adverse to a revival of the redistribution trade. Long before American occupation of the Philippines, the course of Oriental trade had changed so radically that such Oriental ports as Hongkong acted as centers of redistribution to Manila, a condition just the reverse of that which had prevailed during the early years of Philippine trade. The distance from the United States to Asiatic markets, moreover, would be greatly increased, if the Manila route were adopted, for "Manila is from two to five days' travel from the great commercial centers of Eastern Asia, over seas proverbially rough and subject to typhoons."¹ Manila as a port of redistribution must compete with numerous Asiatic ports more favorably situated and already well-established in Oriental trade. In Southern Asia are Singapore, Calcutta, and Bagdad; opposite southern China is Hongkong; on the central Chinese seaboard are Shanghai and other Chinese ports; and in northern Asia are the great ports of Japan. The tendency in recent years has been to conduct trade as directly as feasible with the points of consumption instead of through distant commercial depots. To redistribute American wares to the Orient from Manila would be a reversal of the policy which American as well as European merchants have long striven to follow.

COMMERCIAL VALUE OF NON-CONTIGUOUS POSSESSIONS SUMMARIZED.

In times of hostility the non-contiguous possessions of the United States may possibly serve as bases for the protection of the foreign commerce of the United States with the Orient, Central Asia, and South America; and some of them—San Juan, Manila, and Hono-

¹U. S. Department of Commerce and Labor, *The Commercial Philippines in 1906*.

lulu—may under such conditions also act as points of redistribution. Their chief commercial value, however, though more clearly demonstrated by the past development of some than of others, has on the whole been three-fold:

Taken together, the outlying possessions have become one of the leading sources from which the people of the United States have obtained necessary imports. This has, of course, been of mutual advantage, for the resources of the possession, in order that they might be developed, required large outside markets. The tropical and sub-tropical products of Hawaii, Porto Rico, and the Philippines—sugar, coffee, fruits, tobacco, hemp, and copra—are commodities for which the United States has provided a large and growing market. Other products are also available, although they have not yet entered the channels of trade on a large scale, such as spices and cabinet-woods. The gold, salmon, and furs of Alaska are, likewise, articles which have found an extensive American market, and there are other Alaskan resources—copper, coal, timber, and fish other than salmon—which have barely been touched. Table 62 shows how the value of domestic wares, excluding Alaskan gold, shipped from the outlying possessions of the United States has rapidly risen from about \$35,421,000¹ in 1899, when most of them were acquired, to \$128,207,000 in 1913. Though some of this advance was due to a rise in prices, yet it records a rate of increase more rapid than that of the total import trade of the United States with foreign nations. Indeed, an increase of over 260 per cent during the period 1899 to 1913 was equaled or exceeded by the imports received from but few important foreign countries.

The non-contiguous possessions have become an important market for American exports. Being dependent upon their natural resources as their only commercial asset, they have imported outside manufactures and such foodstuffs as they do not themselves produce in sufficient quantities. Those imported from the United States, as is shown in table 62, have grown from \$21,692,000 in 1899 to \$108,303,000 in 1913, an advance of over 400 per cent. Everywhere, except in the Philippines, the import trade of American dependencies has been almost completely under the control of American exporters. As in the case of the exports shipped from the possessions, this has been to the mutual advantage of both parties, the American exporters finding markets for many of the American wares which have so eagerly sought foreign markets in recent years, and the colonial importers obtaining a supply of needed outside products.

Though the commercial value of the dependencies has been chiefly in their direct trade with the United States, they have in various ways tended to promote the foreign trade and shipping of the United States. Some of them have served as ports of call for vessels engaged in the trade with foreign countries. Honolulu is the port of call

¹Alaskan shipments estimated at \$10,000,000 in 1899.

of one of the big ocean lines operating between San Francisco and the Orient; the routes from the Pacific coast to Australia and New Zealand are by way of Honolulu and Tutuila; and Porto Rican ports are points of call in the South American trade. Their value in this regard is limited by the fact that they are not located on the shortest steamship routes to some of the leading foreign markets. Honolulu is not on the Great Circle route to the Orient, nor is it on either the shortest direct route or the shortest route via San Francisco from the Panama Canal to the Orient. Porto Rico is not on the direct route between the United States and the Panama Canal, and the geographical position of Manila has prevented its use as a port of call in the trade between the United States and continental Asia. The location of Honolulu, San Juan, and Manila has likewise limited their value as centers from which American wares might be distributed to surrounding foreign markets.

TABLE 62.—*Shipments of merchandise between the United States and non-contiguous territories, 1889 to 1913.*¹

Shipments from the United States to—	1899	1900	1905	1910	1913
Alaska:					
Domestic merchandise . . .	² \$9,644,000	² \$18,463,000	\$11,228,000	\$17,972,000	\$20,180,000
Foreign merchandise . . .	(²)	(²)	278,000	698,000	648,000
Total	9,644,000	18,463,000	11,506,000	18,670,000	20,828,000
Hawaii:					
Domestic merchandise . . .	9,007,000	13,078,000	11,644,000	20,289,000	30,412,000
Foreign merchandise . . .	299,000	432,000	110,000	271,000	234,000
Total	9,306,000	13,510,000	11,754,000	20,560,000	30,646,000
Porto Rico:					
Domestic merchandise . . .	2,633,000	4,261,000	13,388,000	26,478,000	32,223,000
Foreign merchandise . . .	52,000	380,000	587,000	620,000	932,000
Total	2,685,000	4,641,000	13,975,000	27,098,000	33,155,000
Philippine Islands:					
Domestic merchandise . . .	401,000	2,636,000	6,198,000	16,769,000	25,361,000
Foreign merchandise . . .	3,000	5,000	2,000	64,000	24,000
Total	404,000	2,641,000	6,200,000	16,833,000	25,385,000
Guam and Tutuila:					
Domestic merchandise . . .	7,000	13,000	70,000	90,000	127,000
Foreign merchandise . . .	.....	.....	.....	.....	.....
Total	7,000	13,000	70,000	90,000	127,000
Total domestic merchandise . . .	21,692,000	38,451,000	42,528,000	81,598,000	108,303,000
Total foreign merchandise . . .	354,000	817,000	977,000	1,653,000	1,838,000
Grand total	22,046,000	39,268,000	43,505,000	83,251,000	110,141,000

¹Compiled from Reports of U. S. Department of Commerce. Statistics differ slightly from those contained in reports of War Department and Navy Department.

²Estimates.

³Included in domestic merchandise.

Trade with Non-contiguous Possessions.

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TABLE 62.—*Shipments of merchandise between the United States and non-contiguous territories, 1889 to 1913.*¹—Continued.

Shipments to the United States from—	1899	1900	1905	1910	1913
Alaska:					
Domestic merchandise...	² \$10,000,000	² \$10,000,000	\$10,699,000	\$12,349,000	\$24,015,000
Foreign merchandise.....	(³)	(³)	103,000	91,000	620,000
Total.....	10,000,000	10,000,000	10,802,000	12,440,000	24,635,000
Hawaii:					
Domestic merchandise...	17,831,000	20,708,000	36,069,000	46,161,000	42,652,000
Foreign merchandise.....	(³)	(³)	43,000	22,000	61,000
Total.....	17,831,000	20,708,000	36,112,000	46,183,000	42,713,000
Porto Rico:					
Domestic merchandise...	3,180,000	3,079,000	15,527,000	32,096,000	40,530,000
Foreign merchandise.....	(³)	(³)	106,000	.....	9,000
Total.....	3,180,000	3,079,000	15,633,000	32,096,000	40,539,000
Philippine Islands:					
Domestic merchandise...	4,410,000	5,971,000	12,658,000	17,318,000	21,010,000
Foreign merchandise.....	.....	.....	.....	.....	.....
Total.....	4,410,000	5,971,000	12,658,000	17,318,000	21,010,000
Guam and Tutuila:					
Domestic merchandise...	11,000	1,000	48,000	37,000	(⁴)
Foreign merchandise.....	.....	.....	.....	.....	.....
Total.....	.....	.....	48,000	37,000	.....
Total domestic merchandise...	35,432,000	39,759,000	75,001,000	107,961,000	128,207,000
Total foreign merchandise.....	.....	.....	252,000	113,000	690,000
Grand total.....	35,432,000	39,759,000	75,253,000	108,074,000	128,897,000

¹Compiled from Reports of U. S. Department of Commerce. Statistics differ slightly from those contained in reports of War Department and Navy Department.

²Estimates. ³Included in domestic merchandise.

⁴Not available until final reports are published.

CHAPTER XXIX.

THE ORGANIZATION OF THE FOREIGN TRADE.

Trading companies prior to 1664, 117. The merchant carrier, 117. The common carrier on the ocean, 118. Charter and line services, 119. Steamship lines: organization, consolidations, conferences, 121. International express service, 124. International mail services and payments, 126. Cable and wireless telegraphy, 127. International trade organization, 128. Financing international trade, 130. Marine insurance, 132. Export trade developed by "trusts," 134.

That a growth in the foreign commerce of the United States from a value of \$43,000,000 in 1789, when the Federal Government was established, to \$4,278,000,000 in the fiscal year of 1913 should have occasioned great changes in trade organization is not surprising. The growth in the volume of shipping, each extension of the range of foreign markets and of the sources from which imports were gathered, each addition to the variety of wares exported and imported, and each widening of the base of international trade increased the complexity of the shipping, marketing, and financial organization which was gradually developed for the safe and effective conduct of foreign commerce.

Some parts of the foreign trade organization are similar to the organization which was evolved to conduct the vast domestic commerce of the country, and therefore need not be fully discussed at this point. The place of the railroads, of the domestic water routes, express companies, and domestic telegraph lines, of banks and credit agencies, of produce exchanges, of the domestic postal service, and of corporations, in the machinery of commerce is described in Volume I, Chapter XVII of this work. It is intended to trace here the development of those phases of trade organization which are distinctively or primarily concerned with foreign commerce.

It is at the great seaports that the commodities entering the foreign trade are concentrated—the exports, for distribution throughout the markets of the world, and the imports, for distribution among the interior markets of the United States. The ports are served by a network of railroads and inland waterways, which connect them with the grain fields, cotton and tobacco plantations, live-stock ranches, factories, mills, mines, and forests, and with the numerous inland markets, where many of the wares brought from abroad are consumed. They are also served by deep-sea vessels of many types and flags. The development of the railroads and inland waterways concerned domestic commerce even more than it did the commerce between the United States and foreign countries, but the services rendered by ocean carriers have been primarily in the foreign trade.

In the early stages of American commerce, the ocean carrier was the individual merchant who occasionally carried freight for his neighbors, but whose chief purpose was to convey his own wares to over-sea countries to exchange them for valuable cargoes of foreign wares and precious metals. The possibilities disclosed by the efforts of these pioneer traders soon led to the organization of large trading-companies such as the British and Dutch West India, London, Plymouth, Massachusetts Bay, and New Amsterdam companies.

These companies were colonization and land companies, but their principal object in many cases was to carry on trade. The charters which they obtained from their home governments frequently gave them the exclusive privilege of trading in certain defined ports of America. But the monopolistic trading rights which they enjoyed came to an end long before the American colonies became a nation. After the Dutch lost control of New Amsterdam, in 1664, the famous trading companies had little part in the trade of the thirteen colonies.

THE MERCHANT CARRIER.

The colonial over-sea trade was, after 1664, conducted almost entirely in vessels which were owned by individual merchants or producers and which were operated in connection with their trading business. Such a trade organization, in which ocean transportation was merely incidental to the trading activities of merchants, or in some cases of producers, required relatively large investments of capital and tended to confine the ocean carrying trade to merchants or producers who had extensive funds at their command. Gradually, each trade district had its wealthy "merchant princes," who owned large fleets of ships in which they carried occasional cargoes for others, but which they utilized chiefly in their own trading enterprises. The names of Winthrop, Endicott, Derby, Peabody, Gray, Abraham Pech, and Stephen Girard became famous as merchant-shippers. There were also merchants whose trading sphere was less extensive, but who nevertheless had sufficient capital to own and operate one or more vessels. Some, too, were owned by producers, notably by the tobacco planters of Virginia; and in some cases trading-vessels were jointly owned and operated by several merchants or producers, who realized they could not well conduct an over-sea trade unless they operated a vessel in connection with their mercantile business.

The services of the American merchant-carriers became especially important during the last half decade prior to the Revolutionary War, and subsequently until the outbreak of the War of 1812. During both of the wars with Great Britain many of their fastest vessels acted as privateers, and during the Napoleonic Wars in Europe they acted as the ocean carriers, not only of the United States, but of England and most West European countries as well. The rise of the Oriental trade

during the period of the Confederation, the revival of foreign trade generally after the Federal Constitution was adopted, and the blockade of European and British ports during the European wars created a situation in which the American merchant carriers reached the climax of their prosperity. In view of the limited volume of the foreign trade, the small tonnage of the vessels then in use, the uncharted condition of the seas, and the uncertainty of the outcome of trading ventures in little-known parts of the world, the wide range of markets frequented by these merchant traders was astounding. In addition to trading in the customary ports of Great Britain, Europe, and the West Indies, they dispatched their vessels to many distant regions—to the East Indies and British India, to China, Japan, and the Philippines, to the Cape of Good Hope and many ports of Africa, to South America, to the Oregon Country, Alaska, and the Hawaiian Islands, to Arabia and Russia.

The organization needed to conduct the trade of the merchant carriers was simple and to a high degree personal. In many instances the master of the vessel was its owner, and often the vessel, though sailed by a hired captain, was accompanied by the owner, who took charge of the trading which he had in mind. The great merchant princes who operated fleets of vessels placed their ships and wares in complete charge of trusted captains, who were skilled traders as well as navigators. A vessel would leave port with quantities of specie, precious metals, and a wide variety of miscellaneous merchandise, and after many months it would return with a cargo of spices, silks, china-ware, or other valuable commodities which would be disposed of at a great profit. In order to make sure that careful attention would be given to trading operations, the merchants usually permitted the master and crew to carry a certain amount of freight on their own account. Sometimes the vessels failed to return; in the little-known seas to which the small ships ventured danger was always lurking. The risks assumed by the merchant-carriers and their vessels were large, as were also the losses and profits resulting from the enterprises which they undertook.

THE COMMON CARRIER ON THE OCEAN.

The War of 1812 marked a turning-point in the organization of the ocean-carrying service. During the expansion of foreign trade which followed the restoration of peace in Europe and America, the merchant-carrier of ocean freight was supplanted by the public carrier, whose function was solely the work of transportation. However, the transition from one type of carrier to the other was not abrupt.¹ The merchant-shippers had frequently accepted cargoes from others in addition to those which they carried for themselves, they had often carried the foreign mails, and they had given passage to the relatively

¹Smith, *The Ocean Carrier*, 94.

few passengers who desired to travel in those days. Toward the end of the eighteenth century, ship-owners frequently advertised that their vessels would leave for stated destinations and that arrangements for carrying freight and passengers could be made with the masters. Soon permanent vessel agents were stationed at some of the large ports to book cargoes. Gradually, also, the practice of hiring or chartering ocean vessels became more common.¹ As the demand for public carriers became more widespread an increasing number of such vessels made their appearance.

Numerous causes were instrumental in bringing about the transition. As the base of the foreign trade and its volume expanded many new shippers besides the long-established merchant-shippers of the Atlantic seaboard desired to enter the foreign trade. Some of them knew nothing of ocean navigation, and most of them felt little inclined to invest in sailing-vessels a portion of the funds which were needed in their business. The flow of trade, moreover, became more regular, the risk of loss from sailing uncharted seas and trading in unknown lands and the probability of attacks by pirates and of seizure by foreign men-of-war were diminished, and the margin of profits in the carrying trade as a whole became more certain, while profits resulting from individual voyages no longer attained the proportions which they formerly did. These changes made it possible for vessels to be profitably operated as public carriers, and at the same time removed some of the principal reasons which had induced large merchants to own and operate private vessels. The lack of regular means of transporting the foreign mails, which had long been a source of inconvenience and delay, was another factor leading to the use of public carriers, especially of regular lines. The growing demand for passenger accommodations opened a new field to ocean carriers which could scarcely be entered by private vessels built and operated in the interests of merchants who sold and bought wares wherever they believed the market to be the most favorable. Moreover, the gradual increase in the tonnage of ocean carriers, with resulting increase in their cost, made it difficult for merchants to own vessels.

CHARTER AND LINE SERVICES.

Two types of public carriers emerged: (1) the "tramp" or chartered vessel, and (2) the regular ocean line. The line of demarcation between the services of these two types can not always be readily drawn, because vessels are frequently chartered by navigation companies to be operated in the line service. Ordinarily, however, a "tramp" is an individual ship which is chartered to shippers, either for a trip or for a stated period of time, is operated on no definite schedule and no regular route, while an ocean line comprises a number of vessels

¹Smith, *The Ocean Carrier*, 94; also Johnson, *Ocean and Inland Water Transportation*, 129-130.

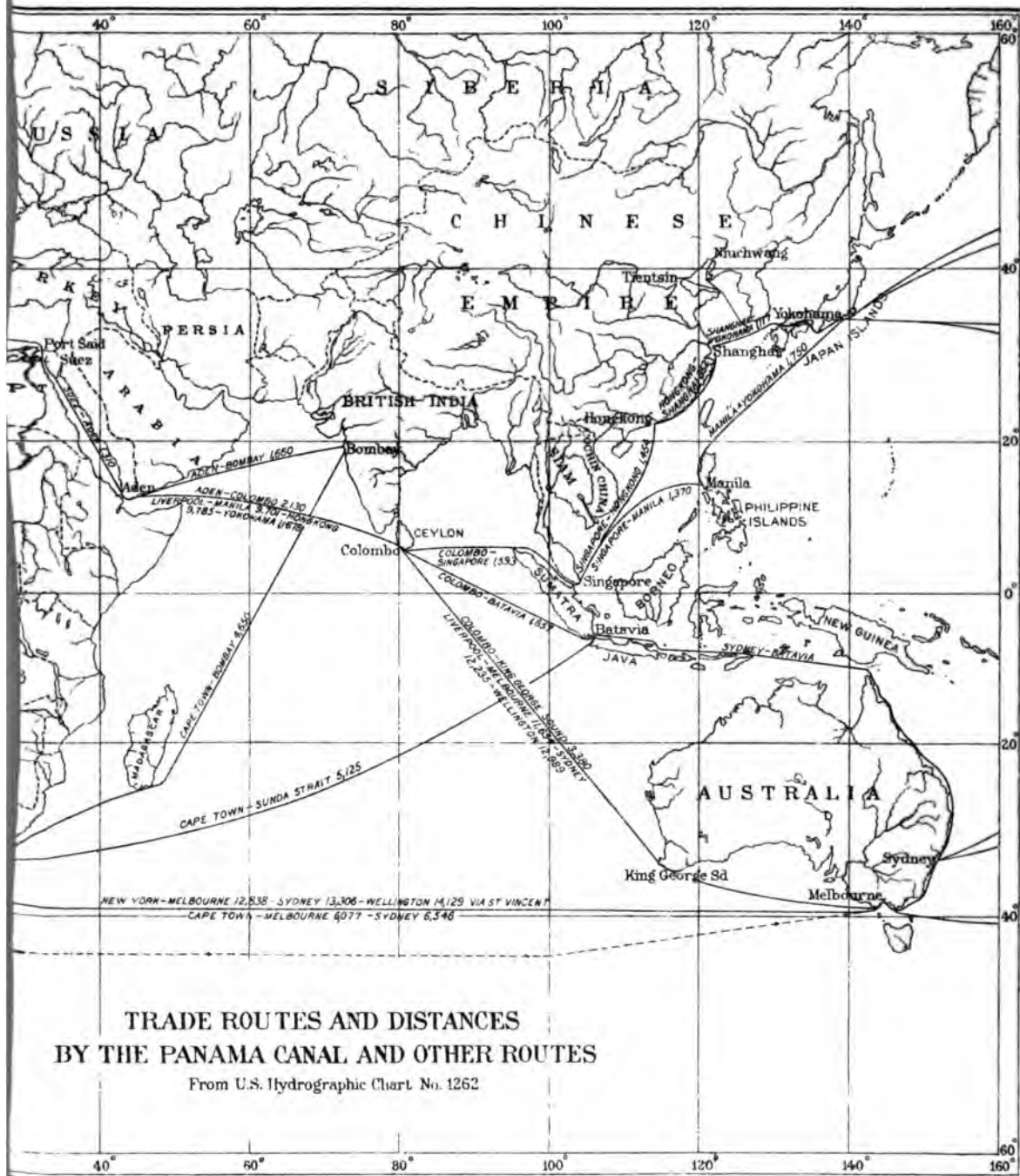
operated regularly, between specified terminals, on a definite schedule. "Tramps" seek cargoes wherever they are available and deliver them anywhere in the world at ports which are not physically or legally closed to them.

These individual or tramp vessels were the first to render a public carrying service. Originally they carried freight of all kinds, passengers, and the foreign mails, but the rise of navigation lines gradually narrowed their field of operation. Wherever lines were established the tramp vessels were deprived of the mails, the passenger business, and the miscellaneous freight cargoes which required rapid delivery or comprised less than a complete vessel-load. The operations of the tramps remain of great importance to the foreign trade, but they are mainly limited to the transportation of full vessel-loads of bulky freight—grain, lumber and lumber products, coal, ore, phosphate rock, and similar low-grade materials, and occasional shipments of heavy iron and steel manufactures. The tramps find most of their cargoes in those ports and in those regions of the world where the steamship lines are least numerous. At the great port of New York, for instance, which is the American center of steamship lines, even the grain exports are for the most part carried by the vessels of regular lines instead of by tramp vessels.

The tramp service, which was originally managed by vessel masters or owners, who advertised for and secured cargoes for their vessels either through their own efforts or in some instances through agents employed for that purpose, gradually came under the direction of ship-brokers. Upon payment of a commission it became the function of these brokers, at all the leading ports of the world, to find cargoes for ships and ships for cargoes, to facilitate the drawing of charter "parties," and in some cases to make temporary advances to ship-masters, so as to enable them to make whatever payments of wages and other expenses it might be necessary to pay before obtaining a cargo. The world-wide connections which these ship-brokers established made the tramp service exceedingly mobile. Without maintaining permanent agents, offices, warehouses, or docks, and without advertising, the owners of chartered vessels were enabled to accept cargoes for any reasonably important destination, and know that upon arrival a ship-broker would instruct them where other cargoes could be secured.

As the volume of trade with Great Britain and Europe, and later with many other parts of the world, became heavier and more regular, something more than individual vessels became necessary. The transportation of passengers, the mails, and likewise high-grade merchandise required a regularity, rapidity, and convenience which the tramp service was inherently incapable of providing. Efforts to establish transatlantic lines were made even before the Revolutionary War, but the vessels advertised to operate in lines rendered no regular or line

MAP 6.



service. There is no evidence that any real ocean line was established in the American trade earlier than 1816, when the Black Ball Line began regular monthly sailings between New York and Liverpool. Numerous other transatlantic lines soon followed. They were known as "packet lines," and the most famous of them consisted of American sailing-vessels.

STEAMSHIP LINES—ORGANIZATION, CONSOLIDATIONS, CONFERENCES.

However, these sailing-packet lines never obtained control of the deep-sea business. Many of the famous "clipper ships" of the period from 1840 to 1850 did not operate in the line service, and from the year 1840 and thereafter the sailing-packet line began to feel the more serious competition of the growing number of steamships, which operated in both the line and the tramp service. The first vessel to cross the Atlantic with aid of steam was the *Savannah*, a sailing packet equipped with engines and paddle-wheels, which made the trip in 1819. It was not till 1833 that a vessel, the *Royal William*, made the transatlantic trip entirely by steam power. Though steam-vessels were for several years confined in their operations chiefly to the inland and coast-wise trade of the United States and Europe, they were gradually introduced into the ocean service in larger and larger numbers, and eventually they gained the ascendancy over the sailing-vessels. The sailing-packet lines and the tramp sailing-vessels also, even the fast and well-built clippers, reached the point of their highest prosperity about 1855, and thereafter their relative position in the ocean carrying trade steadily declined.

The rise of ocean steamers and, after the Civil War, the use of iron and steel rather than wood in steamship construction, were greatly instrumental in the decline of the American ocean carrying trade.¹ After 1861 more and more of the foreign trade of the United States was carried in the ships of Great Britain and other foreign countries. The gross tonnage of the American deep-sea merchant fleet fell from 2,497,000 in 1861 to 782,500 in 1910, and the proportion of the total foreign trade of the United States carried in American vessels during the same years fell from 65.2 to 8.7 per cent. During the years when the sailing packets and clippers had been of greatest importance, from 69.5 to 92.5 per cent of the entire foreign trade had been carried in American vessels. The importance of the American flag in the foreign trade declined soonest in the line service, as it was this service that was first taken over by the steamships. Various efforts were made to maintain the American flag, a notable steamship war being waged in the years from 1850 to 1858 between the Collins Line (American) and the Cunard Line (British), but gradually the foreign trade came to depend very largely upon the steamships of foreign countries.

¹See chap. xxvi, pp. 84-85, for discussion of the causes of the decline in the American ocean marine.

Wherever the volume of the traffic is large enough and the flow of trade or travel sufficiently regular to warrant the establishment of a regular service, the steamship lines have crowded out the tramp service. They operate over definite routes, adhere to fixed schedules so far as possible, and operate steamers which on the whole are larger and faster and are equipped with more conveniences than those which ply in the tramp service. Some steamship lines confine themselves to a strictly freight service, but a larger number operate combination steamers which carry both freight and passengers. The regular cargoes of the great ocean liners consist of passengers, mail, express traffic, and a large variety of high-grade freight. Frequently they also accept partial cargoes of grain and other bulky freight, especially at those great world ports where so many steamship lines operate that the volume of freight, bulky or otherwise, is insufficient to fill the cargo space of all the steamers.

The organization of the steamship-line service is more complex than that of the tramp service. Steamship lines require an extensive business organization, with executive and corporate, operating, and traffic officials. They require permanent agents at the ports in which they operate and throughout the interior of the countries which they serve; they conduct advertising campaigns, they operate warehouses, and where public docks are not available they usually own or lease permanent docks. At some American ports they have entered into agreements with connecting railroad carriers with regard to the use of terminal facilities and the interchange of traffic.¹ Operating on definite routes, they have also seen fit to enter into contracts with bunker-coal companies, which at contract prices provide them with fuel. Some lines provide themselves with fuel, but most of the hundreds of coaling stations which have gradually been established throughout the world are operated by coaling companies, which sell fuel to steamship lines under contract and to tramps at somewhat higher current prices.²

From small packet lines operating between two terminal ports, the line service has developed into huge steamship lines made up of trunk lines and branch lines or feeders. In many respects they have come to resemble the large railroad systems of the United States, the main trunk lines which connect the great ocean terminals of the world being fed not only by railroads, canals, inland waterways, and smaller independent steamship lines, but also by affiliated and subsidiary branch lines which operate in direct connection with the ocean trunk lines. The Hamburg-American Packet Company, for example, operates 70 different services, touching at 300 ports of the world. The tonnage of this line, which began with a few sailing-vessels in 1847, grew to more than 200,000 tons in 1893; 736,000 in 1905, and 1,360,360 in 1913.

¹S. S. Huebner, *Report on Steamship Agreements and Affiliations in the American Foreign and Domestic Trade*. (Report of House Committee on the Merchant Marine and Fisheries, 63 Cong., 1914, IV, chap. ix.)

²Johnson, *Panama Canal Traffic and Tolls*, chap. x.

The North German Lloyd, which began operation in 1857 with three steamers, had, in 1913, a fleet of over 825,000 tons, and the Royal Mail Steam Packet Company operated fleets totaling 1,380,500 tons.

These enormous fleets, which were brought together by individual navigation companies, partly through the purchase, construction, and chartering of steamers and partly by amalgamation with or by purchasing controlling interests in lines which formerly were independent, disclose but one phase of the organization of the line service. Another phase of steamship organization is the widespread control, by agreements and conferences, of the competition which originally existed between the various lines. From the standpoint of ease of control, the line service differs essentially from the tramp service. There are thousands of tramps, which operate independently of each other, with the entire ocean or large parts of it as their highway, but the number of lines is limited and their activities are confined to definite ports and ocean routes. Though tramp agreements and associations have not been entirely lacking in the foreign trade of the United States, the services and rates of the chartered sailing-vessels and steamers have always been relatively free from restraint and largely subject to competition among the tramp vessels themselves and, for certain kinds of traffic, with the regular navigation lines. In the line service, on the contrary, the number of conferences and agreements has steadily increased. These agreements vary from oral understandings to written contracts. There are agreements concerning fixed, minimum, and differential rates and fares; the apportionment of traffic by allotting the ports of sailing or by restricting the number of sailings; the limitation of the volume of freight which each line may carry; the pooling of all or a portion of the freight or passenger earnings of the various lines; the depositing of stipulated sums as a guarantee of good faith; and the relations between conferences or between conference and non-conference lines. There are deferred rebate systems, understandings as to the use of fighting-ships against competing lines, contracts with shippers, and in some cases agreements with American railroads.¹ In a Government investigation of steamship agreements which was made in 1912 and 1913 it was found that there were 80 steamship agreements and conferences in the foreign trade of the United States, and "that as regards nearly every foreign trade-route practically all the established lines operating to and from American ports work in harmonious cooperation, either through written or oral agreements, conference arrangements, or 'gentlemen's understandings.'" The few instances where two or more lines serve the same route and have denied the existence of written or oral agreements for the regulation of the trade are exceptions and not the rule."²

¹For detailed statement see S. S. Huebner, *Report on Steamship Agreements and Affiliations in the American Foreign and Domestic Trade*. (Report of House Committee on the Merchant Marine and Fisheries, 63 Cong., 1914, IV, chap. x.)

²*Ibid.*, p. 281.

In addition to the services of the steamship lines and ocean tramps, a third class of ocean service has arisen—that offered by the private bulk-carriers. It is curious that in recent years there should again be a tendency on the part of large shippers to operate vessels in connection with their mercantile or producing industries, similar to the practice of the old merchant-carriers. The more recent use of privately operated vessels has been mainly on the part of large producers in some of the great industries which have bulky products to distribute or require bulky raw materials. Thus many private bulk-carriers are used to transport oil, lumber, coal, ore, asphalt, building materials, lime, and heavy iron and steel products.

The line of demarcation between private and public carriers is difficult to draw, since many of the vessels which are operated by industrial concerns, acting primarily as private carriers, also carry for hire occasional cargoes of freight. It is especially difficult to classify those steamship lines which are operated by mercantile concerns, but which regularly carry freight for others, and even passengers, express goods, and foreign mails. Such, for instance, is the practice of the great fleet of fruit steamers operated by the United Fruit Company. It is noteworthy also that some of the regular steamship lines serving the United States have for many years been operated in connection with some of the large export and import houses of the port of New York. Vessels of this kind are ordinarily classed as public carriers, the term private bulk-carrier being applied to such individual vessels as are operated by industrial concerns in direct connection with and primarily in the interest of the industries which they serve.

INTERNATIONAL EXPRESS SERVICE.

Though the ocean and inland carriers which transport the wares annually exchanged between the United States and foreign countries have been the principal factor in the machinery of the organization of foreign commerce, numerous shipping and transportation agencies have been developed, which occupy an important position. In 1840, shortly after Mr. William F. Harnden had founded the first domestic express line in the United States, this pioneer expressman established an international express service. Harnden and Company established agencies in the leading cities of England, France, Scotland, Ireland, and Germany, and not only was a regular express business conducted, but arrangements were made whereby the company could draw bills of exchange either upon its foreign agents or upon foreign banks.¹ The company also became a popular immigrant agency, arrangements being made with a large packet-ship line and with numerous Erie Canal boat lines for the cheap carriage to the West of the many European immigrants who were solicited by passenger agents employed for that pur-

¹Stimson, *History of the Express Business*, 44.

pose. Mr. Stimson states that "Harnden & Co. underrated the value of their home expresses, so full were their minds of the superior magnitude of their foreign operations. They were receiving and sending to the West scores of ship-loads of emigrants, and actually had under their control the bulk of the foreign passenger business." Soon after the death of Mr. Harnden the domestic express lines of the company were disposed of; the foreign passenger business was discontinued and Harnden & Co. confined their efforts to conducting a foreign banking and commission business.

After 1851, when the new proprietors of Harnden & Co. failed, foreign express services were conducted by some of the large domestic express companies. The foreign business, however, being limited in volume, was gradually confined to but four of these companies—the American, United States,¹ Wells-Fargo, and Adams. The first three conducted their international business through foreign departments, while the Adams Express Company conducted a European service through a subsidiary concern, the Morris European and American Express Company. The methods of performing the foreign express service differ widely from those which have been developed in the domestic service, in that the companies ship at current ocean rates instead of making term contracts with the steamship lines, and in that they have ordinarily operated through forwarding agents in Europe and elsewhere instead of through their own express agents.

Much of the international express business has for many years been handled by the regular freight forwarders, who engage in the business of forwarding all kinds of freight for American shippers. These forwarding concerns, which are located at all the large ocean ports of the United States, have for many years been among the leading international shipping agencies. In the absence of through rail and water routes and through bills of lading it frequently becomes necessary that shippers or consignees should have representatives at the ocean ports to see that their freight is transferred between the rail and water carriers, that shipping papers are properly executed, marine insurance is obtained, and that all other shipping requirements are fulfilled. The freight forwarders, who see that shipments are properly forwarded to destination, frequently cooperate with other shipping and transportation agencies. Thus they may engage trucking or cartage companies to cart the freight which is being shipped, lighterage companies to perform lighterage services, steam or electric cranes to handle heavy articles, custom-house brokers to clear imported wares at the custom-house, and foreign freight forwarders to forward cargoes to interior destinations, after they arrive at foreign ports. The work of freight forwarding is frequently performed for the shipper or importer by agents permanently employed for that purpose or by the various importing

¹The United States Express Company discontinued services in 1914.

and exporting concerns which conduct an international trade. Some shipments between the interior of the United States and foreign countries, moreover, are made on through bills of lading, the carriers themselves in that case forwarding the freight to destination. The operations of the freight forwarders have consequently been narrowed, but they will doubtless remain a part of the foreign-trade organization so long as the carriers generally fail to establish through rail and water routes and refuse to issue through export and import bills of lading.

INTERNATIONAL MAIL SERVICES AND PAYMENTS.

One of the earliest difficulties encountered in the foreign trade was the delay, uncertainty, and expense of the international mail service. Though provision was at various times made in the colonies for the conduct of a domestic mail service and for the carriage of international mails to and from the ports, concessions being granted to certain persons at various times,¹ the mails were frequently conveyed and handled privately by stage-drivers, tavern-keepers, merchants, travelers, and vessel captains. It was a common practice for a tavern-keeper at New York to hang up a coffee bag for letters destined to foreign countries, the letters being placed under the care of vessel captains who called for them and who also delivered to the tavern-keepers such mails as they brought from abroad. After the establishment of a general postal union in 1775, under Benjamin Franklin, and the organization of the Post Office Department with a postmaster-general at its head in 1789, the foreign mail service was gradually improved. Until 1816, however, all the foreign mails were dependent upon the sailings of individual ocean vessels. The rise of the ocean line service since that time has given the foreign mails a regularity which was formerly unknown, but it was many years before all the commercial countries of the world were connected with the United States by navigation lines.

In the absence of mail contracts, the vessels carrying the foreign mails have been paid in accordance with the amount of mail carried. Mail contracts have, however, been authorized at various times as a means of insuring improved mail services and of subsidizing American steamship lines. During the period 1845 to 1858 the United States Government entered into mail contracts with a number of lines, the largest sums being paid to the famous Collins line, and smaller amounts to the Ocean Steam Navigation Company, the New York and Havre Steam Navigation Company, the United States Mail Company, the Pacific Mail Steamship Company, the Empire City Line, and Mr. M. C. Mordecai.² The policy of mail subsidy was abandoned in 1858, after \$14,500,000 had been paid out under these mail contracts.

After the Civil War Congress made provisions for mail contracts

¹Woolley, "Early History of the Colonial Post Office," in Publications Rhode Island Historical Society, 1894.

²Keiler, *American Shipping*, 66-73.

with three ocean lines, one operating from New York to Brazil, one from San Francisco to Hawaii, and the other from San Francisco to China and Japan. From 1877, when the last of these contracts expired, until 1891 the foreign mails were carried without contracts. At present they are handled partly by steamers operating under the mail-contract act of March 3, 1891, and partly by steamship lines which are paid all or a portion of the postage received by the United States from the mail carried. The six American lines which in 1913 were operated under contract were paid in accordance with the length of their routes, and the tonnage, speed, and structural material of their steamers. In 1912, \$3,917,000 was paid for the transportation of the foreign mails, \$983,160 being paid to steamship lines operating under contract.

The development of the international postal service has been greatly aided by the Universal Postal Union, which was established by international treaty in 1874. The Postal Union rates have since then applied to the mails sent from the United States to all foreign countries except those with which special arrangements have been made. The postal rates to an increasing number of countries have been reduced below the Postal Union charges, and the United States has also entered into parcel-post arrangements with forty-seven countries, the agreements ordinarily providing for the mailing of parcels with a maximum weight of either 4 pounds 6 ounces or 11 pounds.

CABLE AND WIRELESS TELEGRAPHY.

As in the case of trade within the United States, the foreign trade was greatly facilitated by the establishment of the telegraph service. Efforts to transmit signals commercially through wires laid under water were made as early as 1839, but the first submarine cable of any length was laid in 1847 from Dover, England, to Calais, France. It was not until numerous short lengths of cable had been laid in various parts of the world that the establishment of a transatlantic telegraph service was undertaken. The first transatlantic cable was laid in 1858 between Ireland and Newfoundland, but after successful operation for a few weeks, during which some 200 messages were transmitted, it parted. Owing to the courage and perseverance of Cyrus W. Field and his associates, who promoted this project, a second cable was laid in 1865, but it broke in deep water before completion. In the following year, however, a third cable was laid, this time successfully, and also the cable which had broken in the previous year was recovered and repaired. Since 1866 there has been continuous progress in the construction of submarine cables between the United States and foreign nations. Telegraph companies doing business in the United States operate over 46,300 miles of cables, the most important lines being the five transatlantic cables, the Pacific cable which connects San Francisco with Honolulu, Midway Island, Guam, the Philippines, China,

and Japan; the New York-Havana cable; and the New York-Colon cable. Throughout the world, as a whole, nearly 252,500 miles of ocean cable were in operation in 1904, Great Britain being the leading operator, followed by the United States, France, Denmark, and Germany. By making possible the telegraphic quoting of prices and terms, the reporting of sales on grain and cotton exchanges, the making of direct sales and gradual elimination of middlemen, the rapid transmission of news concerning market conditions, and the rapid adjustment of misunderstandings, and by facilitating international settlements, the submarine cables became one of the most important factors in the organization of the foreign trade.

The ocean cable service has since 1902 been supplemented increasingly by wireless telegraphy. The first transatlantic signal was transmitted by wireless apparatus in 1901 by Mr. G. Marconi, and in the following year complete messages were transmitted between St. Johns, Newfoundland, and Poldhu, Cornwall. For a time the Marconi transatlantic service was confined to news matter, but on October 17, 1907, a limited commercial service became available. Not only has the commercial usefulness of the international wireless service been extended, but the United States and foreign governments are now using it for naval, military, and governmental purposes; and deep-sea merchant-vessels throughout the world have been fitted with wireless apparatus. The use of wireless telegraphy in reporting the location of and in transmitting orders to merchant vessels, and especially in the work of rescuing freight and passenger vessels which are in serious distress, has proved to be a vast benefit alike to ocean carriers, international trade, and foreign travel.

INTERNATIONAL TRADE ORGANIZATION.

Modifications in the organization for exporting and importing, the methods of purchase and sale in the foreign trade, were on the whole made less rapidly than in the domestic trade, but great improvements have nevertheless taken place. During the period of the merchant carrier, trade methods were essentially simple, exports being generally made directly by producers or by merchants, who handled exports on their own account and shipped them in their own vessels, and the import trade for the most part being handled by the same merchant carriers. When the reasons for this simple direct organization ceased, it was gradually superseded by one involving the employment of public carriers and a number of commissionmen, factors, and other middlemen.

In many transactions middlemen performed valuable commercial services, especially in case of small importers and exporters who could not command sufficient initial capital to establish a direct trade organization. Export commission houses continue to this day to handle a substantial share of the foreign trade. Working on a commission basis they receive orders from abroad, fill the orders as desired, and in some

cases take complete charge of the details of shipping and financial settlement. Some export commission houses have, moreover, extended this service so as to conduct selling organizations, either sending salesmen abroad or establishing foreign branch houses. Some of them confine their activities to special commodities, others accept orders for all kinds of American wares, and some conduct an import as well as an export business.

The general tendency in the foreign trade in agricultural products has in recent years been toward the establishment of an organized export market, a movement which has been stimulated by the establishment of organized exchanges and the widespread use of the ocean cable. The activities of the grain and cotton exchanges which are discussed in Vol. I, Chapter XVII, are not confined to the domestic trade. Similar exchanges have been established abroad, and the cable has made possible the daily quoting of prices and the transmission of orders. Export transactions may also be "hedged" by the purchase and sale of future contracts in the same way that domestic transactions are protected. The commissionmen still play their part in the export grain-trade. They handle much of the grain which is shipped to the great primary grain-centers of the Middle West from the country elevators, and some of this grain they ship abroad. A relatively larger share of the foreign grain trade has, however, since the later eighties, been handled by the great central elevator men and by grain dealers and export concerns who may purchase their supply either privately in the Central West or at the ports of exportation.

The break-up of the large cotton plantations after the Civil War resulted in the organization of a system of many middlemen to handle the cotton trade, but later some of the middlemen were eliminated. Though local dealers still occupy an important place in the cotton trade in parts of the eastern cotton-belt, most of the export trade has fallen into the hands of cotton-exporting concerns, whose agents at many points purchase the cotton direct from the grower. One of the purposes of the cotton growers' unions which have been organized is further to remove middlemen from the cotton trade.

The cattle-export trade has also been well organized, most of the cattle being exported by the large meat-packing companies of the Central West and by cattle-exporting concerns. These exporters purchase cattle at the central live-stock yards to which cattle are shipped directly by the growers or feeders, the purchases being made through brokers in accordance with the rules of organized live-stock exchanges. The local cattle dealer has remained only in those parts of the country where the beef-cattle industry is relatively unimportant.

Commission houses still handle much of the foreign non-agricultural trade, but since the later nineties, when the export trade in manufactures became an important branch of the foreign trade, other (usually more direct) methods of exporting have been developed in

many quarters. Numerous export houses have been organized for the express purpose of purchasing American wares and exporting them on their own account. Some of them handle but one kind of article, for instance, some exporting concerns deal only in cotton textiles. Others purchase a large variety of goods and ship them to foreign markets in many parts of the world, and some of them are importers as well as exporters. Many so-called "manufacturers' export agents" have, moreover, entered the export trade, their function being to act as agents and salesmen for manufacturers. Ordinarily they work on a salary basis, although sometimes a commission is charged, and any one of them may act for many different manufacturers of non-competing lines of wares. They solicit orders from export companies, export commission houses, and agents of foreign importers, and in some cases they endeavor to find customers abroad. Some of them take full charge of their customer's foreign business—selling, shipping, and collection.

Direct foreign sales are frequently made to those foreign importers who have established branch houses or agents in the United States, the agents sometimes buying directly from the American producer. Likewise an increasing number of shipments are made directly to foreign countries by American manufacturers. Their foreign sales arrangements differ widely.¹ Many shipments have been consigned to foreign merchants and jobbers, who dispose of them on their own account, and others have been consigned to foreign commission agents, who handle them on a commission basis. The tendency on the part of the largest exporting manufacturers is to establish their own foreign selling organization, either by sending out salesmen or opening branch houses abroad. Many of the American exports which have been especially successful in foreign markets, as refined oils, agricultural implements, steel wares, cash registers, typewriters, meat products, tobacco, and others, have in recent years been sold abroad by American salesmen and branch houses. Exporters who feel unable to open their own foreign establishments have frequently utilized the service of "combination salesmen," who handle the non-competing wares of various manufacturers. They act as the exporters' agents, using the names, letterheads, and invoice blanks of their employers.

FINANCING INTERNATIONAL TRADE.

Still another phase of foreign trade organization was the development of the machinery for financing exports and imports. During the colonial era and for some years later a considerable portion of the foreign trade required no detailed methods of settlement, because the great merchant-shippers commonly made a direct exchange of American wares for foreign wares, their profit arising from the sale of the imports which

¹Hough, *Elementary Lessons in Exporting*, 39; *Ocean Traffic and Trade*, chaps. xiii, xiv.

they brought to America. Frequently also they would carry with them on the outward voyage specie and bullion or (in the case of the Oriental and Philippine trades) Mexican dollars, to pay for the foreign wares which they purchased. In the well-developed trade with Great Britain, some of the European countries, and the West Indies, all of these practices prevailed to some extent, but banking methods were here more commonly applied. Bills of exchange had been used in Europe since the thirteenth century,¹ and they were used to some extent in the early foreign commerce of America. However, it was only gradually, after the international commerce of the world was better organized and international banking arrangements were generally established, that bills of exchange became the common method of international settlement.

Various types of bills of exchange have been evolved, the two great classes being those which are drawn on a bank or banker, and those drawn directly on the purchaser of the exported or imported wares. The former class is, on the whole, the most commonly used, for the buyers and sellers of the wares in the foreign trade are frequently almost unknown to each other. This method of financing ordinarily implies the establishment of bankers' credit with some large banking-house, usually at London, Paris, or New York, the shipper being notified that the bank will accept for payment bills of exchange with documents attached up to a specified amount. In the Chinese and Japanese export trade the bankers' credit is sometimes displayed by so-called letters of credit, which do not signify that credit has actually been opened, but are merely an advice to the London, Paris, or New York banks from their Chinese or Japanese correspondents that the drawee is regarded as "good for the amount and likely to honor such drafts."² Many bills of exchange are drawn directly on the buyer of the exported or imported wares, although they are, of course, negotiated through banks. They must have attached to them, as must also the drafts drawn on banks, the order bill of lading which represents the wares, indorsed by the shipper, an invoice, and an indorsed insurance certificate. They may be payable at sight or at 30, 60, or 90 days or any other period, thus constituting a safe method of extending credit to foreign buyers. Time drafts, moreover, may be either "D. P." or "D. A.," that is "documents for payment" or "documents for acceptance." The consignee, before he can obtain the wares from the carrier, must present the indorsed order bill of lading, and this he can not do until he makes satisfactory arrangements at the bank to which the bill of lading and draft have been sent. In the one case he is required to pay the amount of the bill of exchange before obtaining the bill of lading, while in the other it is given to him upon his formally accepting the draft for payment at the time when it will fall due.

¹Day, *History of Commerce*, 120.

²Hough, *Elementary Lessons in Exporting*, 99.

It is estimated that 75 per cent¹ of the foreign trade is transacted subject to the terms of documentary bills of exchange; the remainder is transacted in a variety of ways. Open accounts are sometimes established when buyer and seller are well known to each other, collections being made at certain specified times. Large business concerns of good standing sometimes utilize two or three months' bills drawn on a European bank or banker as a commercial credit. No documents are required in this transaction, the banker merely accepting the bills drawn on him with the understanding that his customer will supply the necessary funds before the bills fall due. Sometimes so-called "finance bills" are used,² but their only importance in the foreign trade of the United States is in case of those drawn by American firms on their own European branch houses. Such bills, which are then known as "house bills," have been popular in the past, but in recent years, owing to antagonism on the part of European discounters, they have been used less freely.

MARINE INSURANCE.

The foreign trade organization would be very incomplete without means of insuring the cargoes shipped abroad, the freight due on cargoes, and the vessels in which they are carried. The many risks incurred in deep-sea shipping and the limited liability of the ocean carriers in case of loss or damage make it essential that shippers should protect themselves by taking out marine-insurance policies. The most approved methods of international settlement, moreover, require that a marine-insurance policy or certificate shall accompany the bill of exchange, invoice, and bill of lading. It is stated that marine insurance was practiced many centuries before the origin of other forms of insurance.³

The development of marine insurance in the United States is divisible into four main periods.⁴ During the first period, which extended throughout the colonial era and until 1793, marine insurance was written by personal underwriters, and American shippers and vessel-owners depended very largely upon the private underwriters of Great Britain. The first marine insurance office in Philadelphia was not established until 1721, and the first one in New York not until 1759. The organization at Philadelphia of the Insurance Company of North America in 1794 marks the beginning of the second period. This period, which extended to 1840, was characterized by the rise of corporate underwriters and by great fluctuations in the volume and condition of their business. The marine insurance business, a large share of which

¹Hough, *Elementary Lessons in Exporting*, 99.

²Warburg, *The Discount System in Europe*, 12. (Publications, National Monetary Commission.)

³S. S. Huebner, "Development of Marine Insurance," in *Annals of American Academy of Political and Social Science*, Sept. 1905, p. 243.

⁴*Ibid.*, 252.

was conducted by American insurance companies, was greatly influenced by the fluctuations which occurred in the foreign trade, by the increased competition between marine underwriters, the incomplete knowledge of sound insurance methods, and by the Napoleonic wars. The extraordinary losses by capture and detention during these wars depleted the resources of many insurance companies.

The twenty years following 1840 constituted the third or "golden period" of American marine insurance. The growth of the American ocean marine and of American trade and shipping, the increasing number of long voyages, and the high insurance rates which prevailed gave a strong impetus to the growth of the marine insurance business in the United States. This prosperous epoch was followed by one of gradual but almost continuous decline in American marine insurance. As is elsewhere stated, the deep-sea merchant fleet of the United States passed through a long period of decline which extended from the Civil War to 1913—a decline which was for some years furthered by British marine underwriters, who pursued a policy of giving preference in insurance rates to British vessels. Meanwhile, the amount of foreign competition steadily increased, foreign underwriters no longer being satisfied with such American business as came to them. During the decade beginning in 1870 they began to invade the field of American marine-insurance companies by establishing offices in the United States. In late years much the larger share of marine insurance of the United States as a whole has been written by foreign underwriters. Indeed, there are now but seven domestic companies which do a large business, and of these but one confines its activities to marine insurance. Unlike the foreign companies operating in the United States, but five American companies do an exclusively marine-insurance business, all the others depending largely or partly upon fire insurance.¹ In the United States, as throughout the world, Lloyds' Association of London has become the controlling marine-insurance organization. Since the seventeenth century this organization has developed into the world's leading marine-insurance exchange, providing the information necessary to conduct the marine-insurance business intelligently, the regulations governing the business conduct of the members, the quarters where its members may conveniently insure risks, the rules governing the construction of vessels, and a large staff of surveyors and agents, who inspect and classify vessels at the leading ports of Great Britain, the United States, and elsewhere.

In recent years there has been a tendency, especially on the part of large ocean navigation companies, toward self-insurance. Marine-insurance companies, however, continue to underwrite the ocean cargoes, the vessels of practically all the smaller lines, the almost number-

¹S. S. Huebner, "Development of Marine Insurance," in *Annals of American Academy of Political and Social Science*, Sept. 1905, pp. 267-69.

less tramps which roam the seas, the vessels of the many large lines which have not inaugurated the policies of self-insurance, and a portion of the risk of the great ocean lines which partially insure their vessels in self-insurance funds.

In the discussion of domestic trade, rather than of foreign commerce, the rise of large industrial corporations or so-called "trusts" was treated because their main activities have been in production and marketing within the United States. From 1890 to 1899, however, when manufacturers became important in the foreign trade, their activities were extended to foreign markets. Indeed, a large share of the success of the United States in exporting manufactures has been due to the efforts of large corporations. So long as the exports of the country consisted largely of foodstuffs and raw materials which were needed in European countries, there was little difficulty in finding foreign markets; but in the development of markets for American manufactures in competition with foreign exporters the difficulties have increased many fold, with the result that the large corporations have led and the smaller shippers have followed in their wake.

With few exceptions only the largest shippers have been able to develop a direct exporting organization, with salesmen and branch houses in the field, to undertake expensive foreign campaigns, and to bring American wares effectively before foreign buyers who were in the habit of buying from European exporters. Some of them have undertaken the operation of large fleets of ocean-going vessels, for the purpose of reducing freight costs and guaranteeing a direct transportation service.

CHAPTER XXX.

COMMERCIAL TREATIES OF THE UNITED STATES.

General commercial and navigation treaties, 135. Most-favored-nation clause, 137. The treatment of shipping, 138. Special commercial treaties and agreements, 140. Treaties concerning river and lake navigation, 141. Treaties regarding interoceanic canals, 141. Concerning Canadian canals, 143. Special trade reciprocity treaties, 144. Commercial treaties with China, 145. Commercial treaties with Japan, 149. International conventions, agreements, unions, and other acts, 152.

Nations engage in commerce with each other in consequence of the rights and privileges which they may grant to each other. This privilege of foreign trade which one country grants to another may be, and frequently is, extended by courtesy, but it is commonly granted in formally proclaimed treaties, agreements, conventions, or other international acts. In the same way the conduct of special matters relating to commerce and shipping, such as the collection of tariff duties, the interchange of consuls, and the protection of patents, copyrights, and trademarks, may at times be left to international courtesy, with entirely satisfactory results, but such matters are nevertheless commonly regulated by treaty. When a trade privilege is granted by one nation to another in a treaty, it then becomes a treaty right which is legally binding and may properly be enforced.

Commercial treaties,¹ agreements, conventions, etc., may conveniently be classified as (1) general "commerce and navigation treaties," (2) special commercial treaties, (3) commercial treaties with certain countries, the trade customs of which differ from those ordinarily prevailing in international trade, and (4) international conventions, agreements, or other acts to which many nations are parties.

GENERAL COMMERCIAL AND NAVIGATION TREATIES.

Hardly had the United States broken away from Great Britain before the newly established nation began to negotiate commercial treaties with European powers in an endeavor to pave the way for a regular and organized foreign commerce. It was difficult at first to induce foreign nations to enter into comprehensive commercial treaties, yet a general commercial treaty was concluded with France as early as 1778 and 1800, with The Netherlands in 1782, with Prussia in 1785 and 1799, with Spain in 1795, with Sweden in 1783, and with Great Britain

¹The full text of all treaties, conventions, and international agreements of the United States may be found in *Treaties, Conventions, etc., between the United States of America and Other Powers, 1776-1909*, compiled by Wm. M. Malloy (Sen. Doc. No. 357, 61 Cong., 2 sess., 2 vols., 1910), and *Ibid.*, 1910-1913, of the same series, compiled by G. Charles (Sen. Doc. No. 1063, 62 Cong., 3 sess., 1 vol., 1913). These volumes contain most of the material used in writing this chapter. Use has also been made of Moore, *Digest of International Law* (House Doc. No. 551, 56 Cong., 2 sess., 7 vols., 1906). Reference may also be made to Fisk, *International Commercial Policies* (1910).

in 1794 and 1815. These early treaties were narrow in scope and subject to restrictions. After the war of 1812 the commercial treaties of the United States became more comprehensive, as well as more numerous.

The entire period from 1815 to the Civil War was replete with negotiations, and general commerce and navigation treaties were accepted not only by most of the countries of Europe, but also in South and Central America, Mexico, and Asia. Additional treaties of this general type have been made since the Civil War, especially with the more recently opened countries of the world, while others have expired or have been abrogated either by foreign powers or by the United States. The general commercial treaties which have so long governed the trade between the United States and many foreign nations are variously known as treaties of "peace and commerce," of "friendship, boundaries, commerce, and navigation," "friendship and general relations," "amity and commerce," "friendship, commerce, and extradition," "friendship, commerce, and navigation," and by other titles, but they are most commonly referred to as treaties or conventions of "commerce and navigation."

Though these treaties are by no means identical, they ordinarily contain common provisions concerning a limited number of commercial subjects, and usually include a clause providing for *reciprocal freedom of commerce and navigation*, a clause which was limited and restricted in some of the earlier treaties, but which later became more general. The first commercial treaty with Great Britain, for example, Jay's treaty of 1794, specifically excepted the British West Indies and Canada from this general clause, and the treaty of 1815 did likewise. A typical statement of the usual provision for reciprocal freedom of commerce and navigation is contained in the Prussian treaty of 1828:

"There shall be between the territories of the high contracting parties a reciprocal liberty of commerce and navigation. The inhabitants of their respective States shall mutually have liberty to enter the ports, places, and rivers of the territories of each party, wherever foreign commerce is permitted. They shall be at liberty to sojourn and reside in all parts whatsoever of said territories, in order to attend to their affairs; and they shall enjoy, to that effect, the same security and protection as natives of the country wherein they reside, on condition of their submitting to the laws and ordinances there prevailing."

Supplementary to the general provision for freedom of commerce and navigation, a separate clause frequently stipulates certain mutual trade privileges. For example, Article 6 of the Brazilian treaty of 1828 provided as follows:

"It is likewise agreed that it shall be wholly free for all merchants, commanders of ships and other citizens or subjects of both countries to manage themselves, their own business, in all the ports and places subject to the jurisdiction of each other, as well with respect to the consignment and sale

of their goods and merchandise by wholesale or retail, as with respect to the loading, unloading and sending off their ships, they being in all these cases to be treated as citizens or subjects of the country in which they reside, or at least to be placed on a footing with the subjects or citizens of the most favored nation."

MOST-FAVORED-NATION CLAUSE.

The commerce and navigation treaties are especially important because of the "most-favored-nation" clauses which they contain. Ordinarily the most-favored-nation clause in the commercial treaties of the United States is a general clause in which the contracting nations guarantee to treat each other in the same manner as they treat the most favored nation in all matters of commerce and navigation, providing the conditions are identical. As early as 1778, for instance, the French treaty of "amity and commerce" provided that "the most Christian King and the United States engage mutually not to grant any particular favour to other nations, in respect of commerce and navigation which shall not immediately become common to the other party, who shall enjoy the same favour, *freely, if the concession was freely made, or on allowing the same compensation, if the concession was conditional.*" The most-favored-nation clause stated in this way has become known as the American or restricted clause, as distinct from the unconditional clause contained in the treaties between European countries. The most-favored-nation clause of some American treaties does not specifically express its restricted nature, but it is now understood by all nations that, under the American interpretation, the granting of special trade concessions to one country does not entitle all other treaty powers to such concessions unless the concessions were freely made, or unless the other countries are willing to make the same compensation as the most favored nation. European nations have at times charged the United States with a violation of the most-favored-nation clause, but such charges have usually been due to a failure to understand the restricted nature of the American clause.

In addition to making the general clause applicable to all commercial matters, it is a common practice specifically to extend most-favored-nation treatment in the matter of the duties on imports and exports. The Prussian treaty of 1828, for instance, although it contains the usual most-favored-nation clause, also provides that—

"No higher or other duties shall be imposed on the importation into the United States of any article, the produce or manufacture of Prussia, and no higher or other duties shall be imposed on the importation into the Kingdom of Prussia of any article the produce or manufacture of the United States, than are or shall be payable on the like article being the produce or manufacture of any other foreign country. Nor shall any prohibition be imposed on the importation or exportation of any article the produce or manufacture of the United States, or of Prussia, to or from the ports of the United States, or to or from the ports of Prussia, which shall not be equally extended to all other nations."

The restricted interpretation has been applied by the United States to all such clauses. It is now understood that they do not prevent the United States from entering into special reciprocal treaties with a favored nation, and that other treaty powers are not entitled to similar treatment, unless they make the same compensation, or unless the concessions were freely made by the United States.

Most-favored-nation treatment is also, in many commerce and navigation treaties, especially applied to the consular and diplomatic service. The Argentine treaty of 1853, for example, contains the following typical clause:

"The Diplomatic Agents and consuls of the Argentine Confederation shall enjoy, in the territories of the United States, whatever privileges, exemptions, and immunities are, or shall be, granted to agents of the same rank, belonging to the most favored nation; and in like manner the Diplomatic Agents and Consuls of the United States, in the territories of the Argentine Confederation, shall enjoy according to the strictest reciprocity, whatever privileges, exemptions and immunities are, or may be, granted in the Argentine Confederation to the Diplomatic Agents and Consuls of the most favored nation."

In some cases the clause is applied only to the consular service, the diplomatic service not being included in the treaties dealing with commerce and navigation.

Most-favored-nation treatment has sometimes been expressly extended in other specified matters. The above-mentioned Prussian treaty of 1828, for example, included the most-favored-nation proviso in the clause providing for reciprocal trade privileges. The Turkish treaty of 1830 provides that "merchant vessels of the United States, in like manner as vessels of the most favored nation, shall have liberty to pass the Canal of the Imperial Residence, and go and come in the Black Sea, either laden or in ballast. . . ." A British convention of 1899 applies it to the tenure and disposition of property. In a number of general commercial treaties the statement of the most-favored-nation clause is so general that it applies not only to commerce and navigation, but to such other matters as are included in the treaties.

TREATMENT OF SHIPPING.

Most of the general commerce and navigation treaties negotiated since 1815 provide for shipping reciprocity. A Congressional act of 1815 authorized the adoption of shipping reciprocity in the direct trade between the United States and foreign countries, and an act of 1828 further extended the principle of reciprocity to the indirect as well as to the direct foreign trade. Clauses were consequently inserted in the commercial treaties with numerous countries, providing first, that tonnage taxes and other shipping dues paid by vessels of the foreign country which is party to the treaty may be no higher than those paid by national vessels engaged in the foreign trade; and, second, that the import or export duties on cargoes should be the same, whether they were carried in foreign or national vessels.¹

¹See chap. xli.

The charge of discrimination, which arose when Congress fixed the tonnage taxes paid by vessels engaged in the trade with Caribbean countries at 3 cents, while those engaged in the trade with other countries paid 6 cents, resulted in the act of 1886, which authorized the President to suspend the payment of all or such part of the tonnage taxes imposed on the vessels of such countries as might reciprocally suspend all or part of the tonnage dues imposed on American vessels; but this endeavor to extend the principle of shipping reciprocity even further than it had been carried in the commerce and navigation treaties which were negotiated after the enactment of the laws of 1815 and 1828 had no practical effects, because foreign nations were either unwilling or unable to permit the entry of American vessels without the payment of the regular tonnage dues.

The commerce and navigation treaties of the United States in many instances contain a clause which excepts the coastwise trade from the various conditions imposed upon foreign commerce. This became necessary after the enactment of the statutes which confined the American coastwise trade to vessels built in the United States and flying the American flag. The scope of "coastwise trade" in international treaties, moreover, has been gradually extended from coastwise traffic not requiring a deep-sea voyage, to traffic between any ports on one or more coasts of a nation taken as a geographical and political unit, and finally also to the trade between any country and its non-contiguous colonies. It was the United States that broke down the distinction between over-sea and coastwise trade, when the trade between the United States and Porto Rico, the Philippines, and Hawaii was defined as coastwise.

Many of these general treaties also contain provisions relative to the reciprocal property rights of the citizens of the United States and those of the foreign country which is party to the treaty. Many, likewise, specify the reciprocal privileges of citizens in matters such as residence, travel, warehousing, and litigation. The treaties establish the mutual right of the contracting countries to have consuls at the various trading centers, and specify their powers. Some commercial treaties, likewise, provide for the exchange of diplomatic agents.

One of the most troublesome of international issues has been the question of the treatment of merchant vessels in time of war, and consequently many of the commerce and navigation treaties contain clauses defining contraband goods, and in some treaties the goods which are not contraband are also specifically enumerated. As regards all goods which are not contraband, the contention of the United States has been that free ships make free goods, and many treaties made during the period from 1782 to the Civil War contain clauses to that effect.

The above provisions are descriptive of the general commerce and navigation treaties commonly negotiated by the United States, but special provisions were in some cases inserted. The Dutch treaty of

1782, for example, prohibited the seizure or detention of "merchants, masters and owners of ships, mariners, men of all kinds, ships and vessels, and all merchandizes and goods in general . . . for any military expedition, publick or private use of any one, by arrests, violence, or any colour thereof. . . ." Jay's treaty of 1794 with Great Britain contained provisions relative to the navigation of rivers and lakes. The Belgian treaties of 1845 and 1858 exempted steamers in the regular trade between the United States and Belgium from tonnage duties and anchorage, buoy, or lighthouse dues. The Danish treaties of 1826 and 1857 contain special clauses regarding the dues on vessels or cargoes passing the Sound or the Belts, the former applying the most-favored-nation clause and the latter abolishing such dues. In some of the general treaties the tariff duties on certain articles or the regulations applicable to them are separately stated—for instance, in the clause in the Belgian treaty of 1845 concerning the importations of fish and salt, and in the clauses in the treaty of 1846 with Hanover and in the treaty of 1847 with Mechlenburg-Schwerin concerning the duties on cotton, leaf tobacco, whale oil, and rice.

SPECIAL COMMERCIAL TREATIES AND AGREEMENTS.

Although the custom of negotiating general commerce and navigation treaties still survives, there has been a tendency during the last half of the nineteenth century to discontinue the practice of negotiating such treaties, and in some instances to displace them with special treaties covering such specific commercial matters as may from time to time arise. Treaties and agreements concerning special trade and shipping subjects were made early in the history of American diplomacy, and their number has in recent years been largely increased.

A special consular convention with France was negotiated as early as 1788 to supplement the general treaty of "amity and commerce" which had been made in 1778. Though it was abrogated by Congress in the following year, it was the forerunner of the numerous similar consular conventions which were signed during the years from 1850 to 1902. They apply the principle of most-favored-nation treatment to the consular service; they define the powers of consuls in contingencies involving such matters as desertions from ships, shipping disputes, damages to vessels, shipments and salvage, the performance of notarial acts, and settling the estates of deceased persons; they also establish the inviolability of consular offices and the exemption of consuls from military service, direct taxes, and preliminary arrest for offenses other than crimes.

Many treaties, agreements, and conventions have been made with reference to the navigation of rivers, bays, and lakes. The "treaty of peace" which was negotiated with Great Britain in 1783 provided that "the navigation of the river Mississippi, from its source to the ocean,

shall for ever remain free and open to the subjects of Great Britain and the citizens of the United States." In 1795 Spain agreed that "the navigation of the said river, in its whole breadth from its source to the ocean, shall be free only to his [the King of Spain's] subjects and the citizens of the United States, unless he should extend this privilege to the subjects of other powers by special convention." The importance of these treaties to the inhabitants of the West has been fully discussed elsewhere.¹ When the Louisiana territory was finally purchased from France, the United States, in the cession treaty of 1803, agreed to maintain complete shipping reciprocity for a period of twelve years in the direct trade of New Orleans or other ports of entry in the ceded territory when conducted in the vessels of France or Spain, and to deny similar privilege to other foreign nations.

The United States has entered into many other special treaties with Great Britain concerning river and lake navigation. In 1818 it was agreed that the harbors, bays, creeks, and rivers of any country which may be claimed by either nation on the north Pacific coast west of the Stony Mountains should be free and open to British and American vessels for ten years, and in 1827 this convention was indefinitely extended. A convention of 1842, likewise, declared the various channels of the St. Lawrence on both sides of Long Sault Island and of Barnhart Island and those of the Detroit and St. Clair Rivers to be free and open to the vessels of both countries. The boundary treaty of 1846 declared the channels and straits opposite Vancouver's Island to be free and open to both countries, and the Columbia River to be free and open to the Hudson Bay Company and all British subjects trading with that company. The Canadian reciprocity treaty of 1854 opened the St. Lawrence River to American ships and Lake Michigan to British ships on mutually equal terms. The treaty of Washington of 1871, likewise, declared the St. Lawrence River and Lake Michigan to be free and open to navigation, and similarly opened the Yukon, Porcupine, and Stikine Rivers. Similar special conventions concerning rivers, lakes, and bays have been negotiated with other countries, notably with Argentina, Paraguay, Mexico, China, and the Kongo Free State.

The use of canals and railroads has been the subject of numerous special treaties and conventions, particular importance attaching to the treaties which govern the construction and operation of canals between the Atlantic and Pacific oceans. In the well-known Clayton-Bulwer Treaty of 1850 the United States and Great Britain guaranteed the neutrality and the use on equal terms by the citizens of Great Britain, the United States, and every other country, of any such inter-oceanic canal, no matter over what route or by whom it might be constructed. The treaty particularly concerned the proposed Nicaragua ship-canal, but it also specifically referred to "any other prac-

¹Chapter xiii.

ticable communications, whether by canal or railway, across the isthmus which connects North and South America, and especially to the interoceanic communications, should the same prove to be practicable, whether by canal or railway, which are now proposed to be established by the way of Tehuantepec or Panama." When the United States Government finally decided to construct a canal across the Isthmus of Panama, this treaty was superseded by the equally well-known Hay-Pauncefote Treaty of 1901, in which Great Britain withdraws from the joint contract which the former treaty established and which omits any reference to the fortification of the canal by the United States, while the United States singly guarantees its neutrality and promises that "the canal shall be free and open to the vessels of commerce and of war of all nations observing these rules, on terms of entire equality, so that there shall be no discrimination against any such nation, or its citizens or subjects, in respect of the conditions or charges of traffic, or otherwise." The Hay-Pauncefote Treaty likewise retained the "general principle" of neutralization established in Article VIII of the Clayton-Bulwer Treaty—the article that guaranteed that the canal charges would be the same for the citizens of the United States, Great Britain, and all other countries. When in August 1912 Congress exempted American ships engaged in the coastwise trade from the payment of tolls, there was a world-wide charge, specifically voiced by Great Britain, that the United States had violated its treaty obligations. The widespread discussion of the treaty throughout the United States, where public opinion was divided, and in foreign countries, where it was uniformly opposed to the action taken by Congress, continued until June 15, 1914, when Congress repealed that clause of the Panama Canal act of August 24, 1912, which exempted American ships engaged in the coastwise trade from the payment of tolls. The repeal was not based entirely upon the question of treaty rights, but partly upon the equally important question of domestic policy.¹

There are various other treaties concerning interoceanic transportation. In a treaty negotiated with New Granada (Colombia) in 1846 the government of New Granada guaranteed that any means of transit or communication which then existed or might in the future exist across the Isthmus of Panama should be free and open to the citizens of the United States and that the citizens of the United States should not be obliged to pay any higher charges than those paid by the citizens of New Granada; and the United States guaranteed the "perfect neutrality" of the Isthmus of Panama and the rights of sovereignty and property possessed in the isthmus by New Granada. In 1853, Mexico agreed that the railroad which was to be constructed across the Isthmus of Tehuantepec should be open to both nations and that "at no time shall higher charges be made on the transit of persons and property of

¹Johnson, *Panama Canal Traffic and Tolls* (1912), chap. xii.

citizens of the United States than may be made on the persons and property of other foreign nations, nor shall any interest in said transit way, nor in the proceeds thereof, be transferred to any foreign government."

In a treaty made in 1864, Honduras guaranteed that any interoceanic railway constructed across Honduras should be open to the United States and that the transit charges paid by citizens of the United States should be no higher than those paid by citizens of the most-favored nation; and the United States guaranteed "the entire neutrality" of such railroad and recognizes the "sovereignty and property rights" of Honduras.

Nicaragua, similarly, in a treaty negotiated in 1867 and denounced by that republic in 1902, guaranteed to the United States the right of transit over any interoceanic canal or water route constructed across Nicaragua, and promised that "no higher or other charges or tolls shall be imposed on the conveyance or transit of persons and property of citizens or subjects of the United States, or of any other country, across the said routes of communication, than are or may be imposed on the persons and property of citizens of Nicaragua."

The United States agreed to protect such interoceanic routes and to "guarantee the neutrality and innocent use of the same." In the Panama convention of 1903, the newly formed Republic of Panama granted to the United States a zone of land 10 miles wide for canal purposes, the compensation being \$10,000,000, an annuity of \$250,000 beginning nine years after the ratification of the treaty, the free passage of Panama government vessels, troops, and munitions of war, and certain other assured benefits. The United States guaranteed the independence of Panama, the perpetual neutrality of the canal, and its operation in accordance with the provisions of the Hay-Pauncefote Treaty.

The Canadian reciprocity treaty of 1854 and the treaty of Washington of 1871 assured the use of the Great Lakes canals on terms of equality as between Great Britain and the United States. The former treaty, which expired in 1866, opened the Canadian canals to the vessels and citizens of the United States "subject only to the same tolls and other assessments as are now or may hereafter be exacted of Her Majesty's said subjects. . . ." In the latter "the Government of her Britannic Majesty engages to urge upon the Government of the Dominion of Canada to secure to the citizens of the United States the use of the Welland, St. Lawrence, and other canals in the Dominion on terms of equality with the inhabitants of the Dominion; and the Government of the United States engages that the subjects of her Britannic Majesty shall enjoy the use of the St. Clair Flats Canal on terms of equality with the inhabitants of the United States, and further engages to urge upon the State Governments to secure to the subjects of her Britannic Majesty the use of the several State canals connected

with the navigation of the lakes or rivers traversed by or contiguous to the boundary line between the possessions of the high contracting parties, on terms of equality with the inhabitants of the United States." When, some years later, Canada undertook to collect a nominal toll of 20 cents a ton upon the merchandise both of the United States and Canada, but to rebate 18 cents for all merchandise which went to Montreal or beyond, the United States Government in 1888 charged a violation of this treaty, and the Canadian Government later withdrew the objectionable discrimination.

Another group of special treaties includes those which regulate or abolish shipping dues collected on certain rivers, sounds, or other navigable waters. In 1863, for example, a special "convention for the extinguishment of the Scheldt dues" was entered into with Belgium. In 1857, Denmark agreed to a "convention discontinuing Sound dues," and in 1861 Hanover agreed to abolish all tolls up to that time levied on American vessels or their cargoes when navigating the river Elbe.

Treaties between the United States and Great Britain concerning the repression of the slave trade were negotiated in 1814, 1842, 1862, 1863, and 1870, and a general international treaty abolishing the African slave trade, to which the United States is a party, was negotiated in 1890. Many of the extradition treaties which were negotiated with various foreign countries, moreover, provide for extradition in case of slave-trading crimes, and several British treaties made in 1818, 1822, and 1826 provided for the restoration of slaves and payment for certain American slaves carried away in British vessels during the War of 1812.

Important among the more recent special acts are the twenty agreements, proclamations, and conventions providing for the mutual protection of copyrights, which were made during the years 1891 to 1912. Ever since 1858, likewise, a large number of agreements and conventions guaranteeing the reciprocal protection of trademarks have been negotiated. In the case of China, the United States not only obtained a trademark agreement from that country in 1903, but during the years 1904 to 1908 also obtained agreements from Denmark, France, Great Britain, Italy, Japan, Holland, and Russia. During the years 1894 to 1911 various agreements were negotiated concerning the protection of patent rights. Many of the special agreements concerning patents and trademarks are supplementary to the general international convention for the protection of industrial property, which was mutually adopted by the United States and many other nations in 1883 and amended in 1891 and 1900. An international copyright convention was also concluded in 1902.

The special trade reciprocity treaties which were negotiated with Canada in 1854, with the Hawaiian Islands in 1875 and 1884, and with Cuba in 1902 and 1903 are fully discussed in Chapter XLI. A similar reciprocity convention was negotiated with Mexico in 1883, but it never became effective, because Congress failed to enact the necessary legis-

lation. The short-lived reciprocity agreements which were negotiated in 1891 and 1892 with Austria-Hungary, Germany, Cuba and Porto Rico, Guatemala, Honduras, Nicaragua, Salvador, Santo Domingo, Brazil, and with Great Britain for the Barbados, Jamaica, the Leeward Islands, Trinidad and Tobago, the Windward Islands (except Granada) and British Guiana, in accordance with section 3 of the McKinley tariff act, are likewise described in Chapter XLI; and so too are the reciprocity agreements negotiated under the third section of the Dingley tariff act, during the years 1898 to 1909, with France, Germany, Portugal, Switzerland, Italy, Great Britain, Holland, and Spain. The agreements made in 1891 and 1892 were terminated in 1894 by the enactment of the Wilson tariff law, and the agreements made under the Dingley act were ended in 1909 by the passage of the Payne-Aldrich tariff act.

Other groups of special commercial treaties are those concerning the fisheries and fur-seal industry, which are discussed in Chapter XXXIII, those which have, since the forties, been made with reference to the protection of property rights, and a limited number of treaties stipulating the special foreign regulations or tariffs applicable to certain commodities. Somewhat different from other conventions are the 47 parcels-post conventions which have in recent years been negotiated by the Postmaster-General and ratified by the President of the United States. There are also a few special treaties and conventions dealing with subjects such as the rights of neutrals at sea, the reciprocal measurement of vessels, the position of corporations and trade associations, and the recovery of deserters from merchant vessels.¹

COMMERCIAL TREATIES WITH CHINA.

Though the general commerce and navigation treaties and numerous special commercial treaties have regulated to some extent the foreign trade of the United States with many countries, the trade with those countries has not depended entirely or even principally upon treaty rights. There have been times when a heavy foreign trade was carried on with some of the well-developed countries of Europe, and even with the less settled countries of North and South America, without the aid of commercial treaties. Trade between the United States and most of the commercial nations of the world has for many years been so well founded that it has not been absolutely dependent upon treaties, even though all treaties which safeguard and define the commercial and shipping rights and privileges of the United States have been an important trade asset. The trade with some countries, however, especially with those which are or have been wholly undeveloped, which at one time were wholly or largely closed to American traders, and whose inhabitants and trade customs differ widely from those existing in other parts

¹Treaty provisions calling for the arrest and imprisonment of deserting seamen terminated by the seamen's act of March 4, 1915.

of the world, has been much more closely dependent upon the commercial treaties which the United States has succeeded in negotiating.

Such a country is China, where for many years the trade of the United States and European countries has depended upon commercial diplomacy, commercial treaties, and in some instances physical force. While the policy of the United States towards China has differed from the policy of European countries in some respects, yet American diplomatic agents have frequently cooperated with those of European powers in the negotiations of treaties and in the protection of the lives and property of foreigners. The chief point of difference has been that the United States has not followed Europe in the acquisition or lease of Chinese territory. The American policy has been that of the "open door," because the purpose of the United States has consistently been the development of international trade. Neither has the United States imitated European powers in the use of physical force, except for the protection of lives and property. It is true, however, that the use of arms by European powers has, in some instances, benefited the United States, inasmuch as the most-favored-nation clause has automatically assured to the United States any trade privileges obtained by force. Moreover, by refusing to join in the aggressive policy of Europe, the United States has at times earned the good will of the Chinese Government.

Although a direct trade between the United States and China had been carried on since 1784, and an indirect trade by way of Europe since a much earlier date, it was only at Canton that China regularly permitted a foreign trade with western nations prior to 1842. On August 29 of that year Great Britain, after the use of arms in the so-called "opium war," entered into a treaty of peace with China, by the terms of which China ceded Hongkong to Great Britain and opened to British subjects and their commerce five treaty ports. In the following year the United States began negotiations for a commercial treaty, and after encountering many difficulties succeeded, in 1844, in obtaining a "treaty of peace, amity, and commerce."

This treaty opened five treaty ports to American commerce—Kwangchow, Amoy, Fuchow, Ningpo, and Shanghai—American citizens and their families being permitted to reside and trade there, and their vessels and cargoes to enter and clear at will. Fees and charges at these ports were formally abolished, the import and export duties were prescribed in a tariff which was made part of the treaty, and it was agreed that American citizens should "in no case be subject to other or higher duties than are or shall be required of the people of any other nation whatever." Chinese tonnage duties were also prescribed in the treaty. American consuls with unusually extensive powers were admitted, it being agreed that "citizens of the United States who may commit any crime shall be subject to be tried and punished only by the Consul or other public functionary of the United States, thereto autho-

rized, according to the laws of the United States." As was also done in the case of other foreign countries trading at the Chinese treaty ports, American citizens were authorized to obtain houses, or places of business, or to lease sites for their construction, the local authorities of China and the United States selecting their location. American traders were enabled to conduct their own trade at the treaty ports, the former requirement that foreign trade must be conducted through certain Chinese hong-merchants at Canton being definitely abolished.

Though this treaty greatly benefited the trade of the United States, the turbulent condition prevailing in China between 1850 and 1860 and the injuries inflicted on foreign merchants by Chinese pirates, caused the United States and several European countries to desire an extension and revision of their treaty rights. Various special American commissioners were sent to China during the years 1853 and 1858 to negotiate a new commercial treaty. The United States Government cooperated with the governments of Great Britain, France, and Russia, which were likewise endeavoring to obtain revised treaties. A joint request was made by the several powers in February 1858, and Great Britain and France moved upon Canton with armed forces. Pursuing a friendly and peaceful although a determined policy, the United States succeeded in obtaining a revised commercial treaty on June 18, 1858, and a supplementary claims convention on November 8 of the same year. Under the claims convention it was agreed that 500,000 taels, or about \$700,000, would be paid out of the receipts from tonnage, import, and export duties on American vessels at Canton, Shanghai, and Fuchow, in full satisfaction of the claims of American citizens.

The additional concessions gained under the "treaty of peace, amity, and commerce" of 1858 were the establishment of diplomatic intercourse with the Chinese Government, with the promise of permanent official residence of diplomatic agents at Peking whenever such privilege should be granted to any other foreign power; the immediate increase of the number of treaty ports from five to eight, and the permission to trade at any other port or place thereafter opened to other foreign countries; a promise to suppress and punish piracy, robbery, and rioting; the right to locate American houses and places of business without interference by local authorities; a revision of tonnage duties; and a promise of religious liberty. An important provision was the guarantee of most-favored-nation treatment in all matters of commerce, navigation, and political or other intercourse. The import and export duties of China were the same as they had been in 1844, except in so far as some of them had been changed by treaty with other nations. Since numerous tariff changes of this kind had been made, a supplementary treaty was concluded, in November 1858, in which the duties and regulations applicable to the trade of the United States were definitely stated.

A new departure in Chinese diplomacy occurred in the summer of 1868, when a legation from China arrived at Washington to negotiate a commercial treaty. Former treaties had been obtained only upon request of the United States and other foreign powers. The underlying principle of the "treaty of trade, consuls, and emigration," which was concluded in July of 1868, was the recognition of the sovereignty of the Imperial Government at Peking over the people of China and over their commercial, social, and political relations with western nations. The United States acknowledged the sovereignty of China over tracts of land which had been set aside for purposes of foreign trade, and agreed that any trade or shipping right not stipulated by treaty should be subject to the discretion of the Chinese Government, and that the United States would not interfere in matters of internal improvement. Chinese consuls were admitted to the United States on the same terms as those of Great Britain and Russia. China on her side made certain concessions regarding travel and residence, voluntary emigration, and religious freedom.

Another commercial treaty was negotiated in 1880, the year in which the first Chinese immigration treaty was signed. It prohibited the importation of opium, established shipping reciprocity as regards duties on both tonnage and cargoes, and provided that controversies between American and Chinese citizens should be tried by the "proper official of the nationality of the defendant," the authorized officials of the plaintiff's nationality, however, having the right to attend and examine and cross-examine witnesses.

No additional treaty, other than the immigration treaty of 1894, was negotiated until 1901, but the United States benefited to some extent by the application of the most-favored-nation clause, five new treaty ports, for example, being opened as a result of the treaty of peace between Japan and China. In 1899, moreover, the Secretary of State, John Hay, addressed diplomatic notes to Great Britain, Germany, Italy, France, Russia, and Japan regarding the future application of the "open door" policy in their leased territories or "spheres of interest" in China, and obtained favorable assurances that the policy would be maintained.

In the meantime the foreign trade of China was frequently disturbed by riots, the most serious disturbances being the so-called Boxer troubles of the year 1900. The armed forces of the various European countries and of the United States were used to protect the lives and property of foreigners, and at the conclusion of the troubles a joint protocol was signed by China, Germany, Austria-Hungary, Great Britain, Belgium, Spain, France, Italy, Holland, Russia, Japan, and the United States. Aside from matters of indemnity, punishment of offenders, and the like, China agreed to negotiate certain amendments to the commercial treaties of the allied nations, and to cooperate in the improvement of the Peiho and Whang-Pu Rivers. The provision with

reference to the latter river was amended by a new international agreement signed in 1905. China also agreed to raise the duties on foreign imports to a minimum of 5 per cent ad valorem, certain articles, however, remaining on the free list.

In accordance with Article XI of the international protocol of 1901, an amended commercial treaty was concluded between the United States and China in 1903. It provided that the diplomatic officers of the United States may permanently reside at the capital of China, that American consuls shall have all the rights of any other foreign consuls, that American citizens may "frequent, reside, and carry on trade, industries and manufactures or pursue any lawful avocation" in all the ports or localities opened to foreign residence and trade, that American citizens may establish bonded warehouses subject to necessary regulations, that they may engage in mining operations subject to the revised mining regulations of China, and that American trademarks, copyrights, and patents shall be protected. China further specifically agreed that having, in 1898, opened the navigable streams to commerce by all steam-vessels registered for the purpose, "citizens, firms, and corporations of the United States may engage in such commerce on equal terms with those granted to the subjects of any foreign power." The Chinese duties on American imports were set forth in an annexed tariff in accordance with the 5 per cent minimum stipulated in the international protocol of 1901; the duties on American exports were limited to a maximum of 5 per cent ad valorem; and in lieu of the former special system of taxation of foreign goods in transit, known as "likin," and various other taxes on foreign goods, it was agreed that one special surtax should be collected at the time of importation. The United States consented to the prohibition of the importation of morphia and instruments for its injection, except for medical purposes, and agreed to relinquish extra-territorial rights "when satisfied that the state of the Chinese laws, the arrangements for their administration, and other considerations warrant it in so doing."

This treaty, which has since 1903 governed the trade between the United States and China, superseded the preceding treaties only in so far as they contained conflicting provisions. It was expressly stated that "all the provisions of the several treaties between the United States and China which were in force on the first day of January, A. D. 1900, are continued in full force and effect except in so far as they are modified by the present Treaty or other treaties to which the United States is a party."

COMMERCIAL TREATIES WITH JAPAN.

Another country in which the trade of the United States has been largely dependent upon rights established by treaty is Japan. Until the United States obtained a treaty in 1854, the foreign trade of Japan was insignificant and was practically confined to China, Korea, Holland, and Portugal. At times only the Chinese and Dutch were allowed to

trade in Japan, the trade of Holland in 1845 being limited to one port.¹ The United States made various attempts to negotiate a commercial treaty with Japan during the years 1832 to 1852, but without success, and without such treaty regular trade with Japan was impossible.

The subject concerning which Japan was finally forced to make a treaty was that of obtaining redress for the mistreatment of American sailors who had been shipwrecked on the coast of Japan. In 1852, Commodore M. C. Perry was intrusted with the mission of securing a treaty, and after much negotiation, enforced by the display of all the naval power at his command, a "treaty of peace, amity, and commerce" was concluded in March 1854. It was but the merest beginning of more extensive trade privileges which were obtained later. Two ports were opened to American vessels as places where wood, water, provisions, coal, and supplies might be obtained. The protection of shipwrecked sailors, passengers, and cargoes was promised. Trading according to regulations established by Japan was to be permitted at the two treaty ports; American consuls were to be received at one of these ports, and the United States was promised most-favored-nation treatment.

The treaty negotiated by Commodore Perry was soon after followed by two more extensive treaties. In 1857 a "commercial and consular treaty" was concluded. American vessels were admitted at three ports, instead of at but two, American citizens were permitted to reside permanently at two ports, an American vice-consul was admitted at one additional port, and it was agreed that "Americans committing offenses in Japan shall be tried by the American Consul General or Consul, and shall be punished according to American laws."

This treaty was in the following year superseded by a "treaty of commerce and navigation," which permitted an American diplomatic agent to reside at Yedo, and American consuls to reside at all the Japanese ports open to American commerce, reciprocal privileges being granted to Japan. A number of additional Japanese treaty ports were specified where American citizens were permitted to lease ground, purchase buildings, erect dwellings and warehouses, and conduct trade. The import and export duties to be paid at these ports were fixed in a tariff schedule appended to the treaty, the opium trade was prohibited, and various trade regulations were agreed upon. It was also agreed that American citizens in Japan should be allowed the free exercise of their religion.

Similar treaties were made by Japan with Great Britain, France, Holland, Prussia, and Russia, which were followed by severe anti-foreign disturbances, the American legation being burned. Moreover, the partisans of the Mikado refused to recognize the treaties which had been made by the Tokugawa Shōgun's Government. When the Prince Daimyō of Chosu, who controlled the Straits of Shimonoseki, closed the

¹Moore, *International Law Digest*, V, 734.

passage to inland navigation, the naval forces of the United States, Great Britain, France, and Holland, at the request of the Tokugawa Shōgun's Government at Yedo, jointly "destroyed the batteries commanding the straits, blew up the magazines, threw shot and shell into the sea, carried away seventy cannon, and obtained the unconditional surrender of the province."¹ The ratification of the treaties by the Mikado followed soon after.

In 1864 the duties on numerous articles imported from the United States were reduced in a "convention for the reduction of import duties." This was, however, in 1866 superseded by a joint tariff convention among Japan, the United States, Great Britain, France, and Holland, which revised the tariffs and foreign trade regulations of Japan, provided for the establishment of bonded warehouses, subjected transit dues to regulation, and permitted Japanese merchants to trade freely with foreigners without the interference of Government officers. In 1878 an extensive commercial convention was negotiated to supersede the convention of 1866 and the commercial clauses of the treaty of 1857, but its enforcement being conditioned upon the conclusion of similar treaties with other treaty powers, it remained inoperative.

After abolishing the feudal system and adopting the imperial form of government in 1868, Japan began striving to obtain a dignified place among the nations of the world. The Japanese Government desired especially to gain complete control of the import duties levied by Japan and to abolish the extra-territorial rights of foreign treaty powers. At length, after many negotiations were undertaken, in July 1894 a revised treaty was concluded with Great Britain, and in November of the same year another treaty was made with the United States. The "treaty of commerce and navigation" of 1894, which became effective in 1899 and superseded all former commercial treaties, was similar to the commerce and navigation treaties which the United States had negotiated with European and other western powers, and it placed Japan on a treaty basis entirely different from that possessed by China. It provided for freedom of commerce and navigation, abolished foreign settlements and consular courts with extra-territorial powers, provided for shipping reciprocity, the exchange of consuls, the protection of patents, trademarks, and designs, the return of deserted seamen, the payment of such import and export duties as are granted to the most favored nation, and the general application of the American most-favored-nation clause to all commercial matters.

The treaty of 1894 was supplemented by a special convention concerning patents, trademarks, and designs in 1897, and by a copyright convention in 1905. The greatly increased trade between the United States and Japan was built up under the terms of the treaty of 1894, which remained in force until 1911. The revised "treaty of commerce

¹Moore, *International Law Digest*, V. 750.

and navigation," which was signed in February of that year, contains most of the provisions of the former treaty, but differs from it in that it provides that future import tariffs shall be "regulated either by treaty between the two countries or by the internal legislation of each." Pending the negotiation of a special tariff treaty, it was later agreed in a special protocol that the tariff provisions of the treaty of 1894 should remain in force. The treaty of 1911 guaranteed the inviolability of dwellings and places of business, abolished all transit duties, promised equality of treatment with native citizens or subjects in matters of warehouses, bounties, facilities, and drawbacks, authorized corporations and other associations to exercise their rights in the courts, and explicitly guaranteed complete freedom of foreign trade and navigation.

There are other commercial treaties, notably those with Korea, Siam, Borneo, the Barbary States, the Kongo Free State, Egypt, Zanzibar, Madagascar, and Ethiopia, which contain provisions differing widely from those contained in the usual commerce and navigation treaties of the United States. Some of the treaties contain special provisions with reference to the import and export duties and tonnage dues which may be collected on American ships and cargoes, and some specify particularly the places at which trade may be conducted and the manner in which it is to be carried on, while others deal with the use of rivers, railroads, and other means of transportation, the protection of persons and property, and the powers of American consuls. Since the trade conducted under these treaties has always been relatively small in volume, they need not be fully described.¹

INTERNATIONAL CONVENTIONS, AGREEMENTS, UNIONS, AND OTHER ACTS.

The United States, jointly with other treaty powers, has become party to numerous international conventions and acts dealing with particular matters of commerce. Some of them have been mentioned in other connections, as, for example, the general act for repression of the slave trade (1890), the international protocol made at the conclusion of the Boxer trouble (1901), the new agreement as to the Whang-Pu River Conservancy (1905), and the international convention for the protection of literary and artistic copyrights (1902).

The United States is also a member of the Universal Postal Union, which was established in 1874 by a treaty called the Universal Postal Convention. In the following year the United States joined with 16 other powers in the establishment of an "international bureau of weights and measures." It was also stated, in connection with trademarks and patents, that the United States is party to the "convention for the international protection of industrial property," which was concluded in 1883 and supplemented in 1891 and 1900. This conven-

¹See *Treaties, Conventions, International Acts, etc.*, I, II, and III.

tion deals not only with trademarks and patents, but with the protection of commercial names, articles at expositions, and alien residents, with seizure of unlawfully marked goods, and with the maintenance of an international bureau. The United States is, likewise, party to the international "convention for protection of submarine cables," concluded in 1884, and supplemented in 1886 and 1887; to the convention concerning the formation of an international union for the publication of customs tariffs, concluded in 1890; and to the international conventions regarding the importation of spirituous liquors in Africa, concluded in 1899 and 1906. In 1903 and 1905, international sanitary conventions of which the United States is a party were concluded; and in 1907 an agreement was made providing for the establishment of an international office of public health. The United States became a party to the international agreement respecting the unification of formulas for potent drugs, concluded in 1906; to the international wireless-telegraph conventions concluded in 1906 and 1912; and to the international convention of 1911 for the unification of rules with respect to assistance and salvage at sea. In 1910 the United States also ratified the international convention of 1907 respecting the rights and duties of neutral powers in naval wars, but, being contingent upon ratification by other powers, the convention did not become effective.¹

The United States is party to various other international conventions not directly concerning commerce and shipping. Those here mentioned are important in that they tend toward the uniform treatment by many powers of the special commercial matters with which they deal. Were it not for these international agreements, more special conventions between the various industrial nations would be necessary.

¹The convention was ratified in 1909 by Germany, Austria-Hungary, Denmark, Mexico, The Netherlands, Russia, Sweden, Salvador, and the United States.

PART TWO

AMERICAN FISHERIES

By T. W. VAN METRE

CHAPTER XXXI.

THE FISHERIES OF NEW ENGLAND, 1789-1860.¹

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Except for temporary difficulties resulting from the tariff policy of the new government and the disturbed state of foreign affairs which eventually culminated in the second war with Great Britain, the New England fisheries, quickened by the stimulation felt generally in all lines of economic activity in the United States, had from 1789 to 1860 a period of great prosperity and expansion. Throughout the colonial period and during nearly all of the first quarter of the nineteenth century the prosperity of the fisheries depended mainly upon favorable conditions of foreign commerce. During the period of the Napoleonic wars the foreign trade of the United States was in a continual state of uncertainty, rising and falling in volume according to the rapid changes in the commercial policies of the French and the English Governments. This lack of stability of maritime commerce rendered impossible the successful operation of the fisheries. With the downfall of the Continental system, the overthrow of Napoleon, and the conclusion of the second peace with Great Britain, the foreign trade of the United States was restored to a normal state, and the long period of peace which ensued gave opportunity for undisturbed development. Moreover, certain internal changes in the United States were of even greater benefit to the fisheries than the restoration of peaceful relations with European nations. The growth of industrial and commercial activity along the Atlantic seaboard, the opening of the Middle West, and the economic progress of the South were attended by a great increase of population, which brought about a constantly growing domestic demand for all the products of the various fishing industries. A home market which took the large portion of the product, and a foreign market that always absorbed the annual surplus, easily made possible the successful pursuit of all branches of the fisheries. The cod fishery, which besides its natural advantages received subsidies from the Federal Government, grew vigorously, its area widening and its tonnage

¹In addition to the references indicated, the writer of these chapters on the fisheries has consulted an unpublished work by Professor Walter S. Tower on the *History of the Fisheries of the United States Outside of New England*, written during 1906 and 1907.

increasing; the whale fishery recovered from its prostration and reached the climax of its development; the mackerel fishery, which was of only minor importance during the eighteenth century, became a notable industry; and other fisheries, such as the oyster, herring, and menhaden, assumed a position of commercial importance. For the sake of greater clearness, these various branches of the New England fisheries will be separately considered.

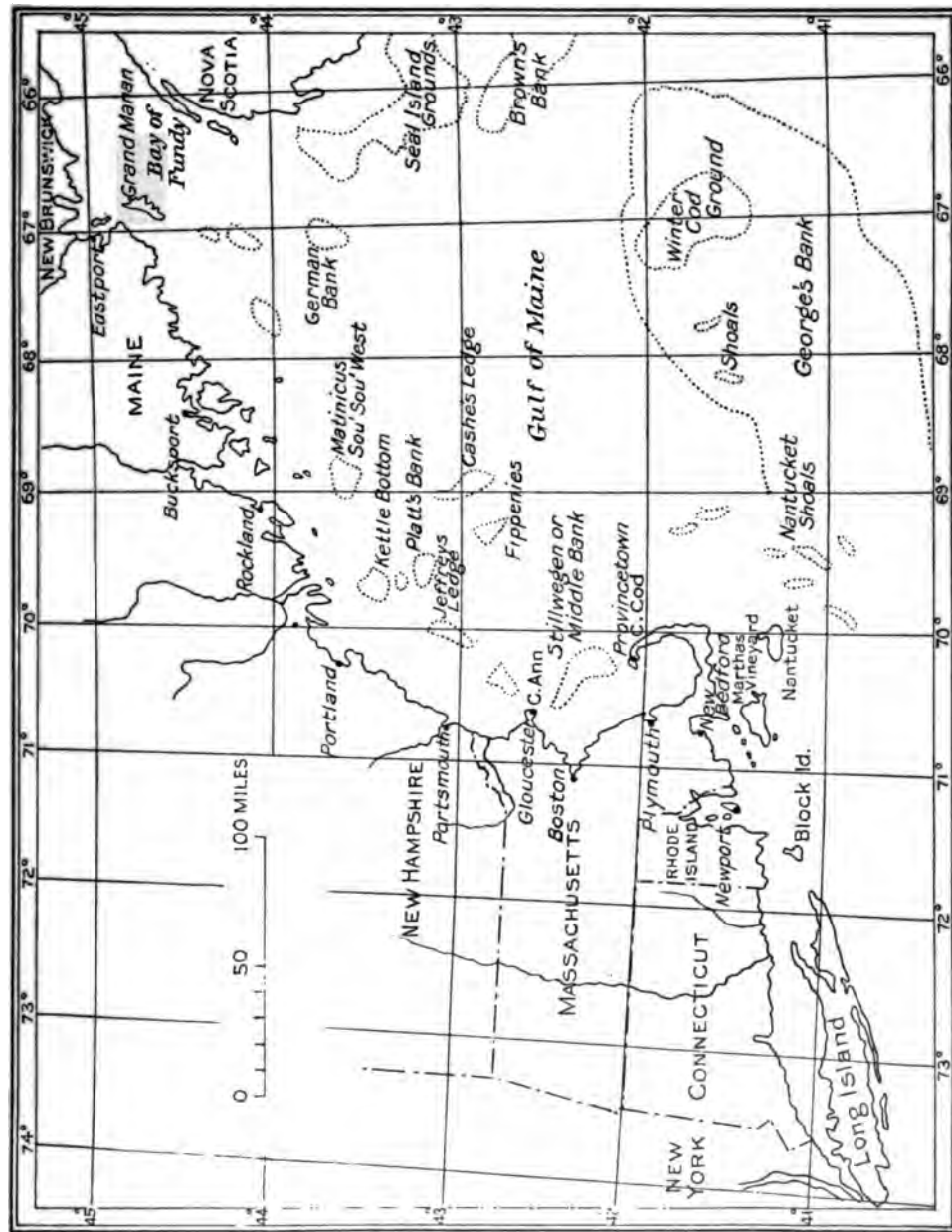
THE WHALE FISHERY.

Until after the close of the second war with Great Britain, the New England whale fishery had a precarious existence, sometimes prospering, when a relaxation of commercial restrictions extended the range of markets and caused prices to rise, only to meet with disaster again, when the market was suddenly limited and an excess of products brought about low prices. Capital was not lacking and whalers were not wanting, but the continual state of uncertainty of political conditions permitted small chance of success in a business in which so long a time elapsed between the inception of the enterprise and the sale of the product. The opening of the French market in 1789 caused a temporary revival of whaling, but the French Revolution and the war between France and England abruptly terminated the short period of prosperity, the shipments to France after 1792 not even paying costs.¹ Trouble between France and the United States in 1798, together with commercial legislation during Jefferson's administration, caused fresh disasters, and though there was a partial revival by 1812, the war with England broke out and put a complete stop to the industry. Many of the whale ships at sea when the war was declared were taken as prizes by the English naval vessels, and those which were fortunate enough to reach home were either converted into privateers or lay idle until hostilities were over.

With the return of peace with England and the termination of the long series of European wars, the whaling industry revived and entered upon a long period of unexampled prosperity. By 1818, the gross tonnage of vessels employed in the whale fishery of the United States was 16,750 tons, the highest point reached up to that time since the beginning of the Federal Government.² The next forty years witnessed an almost continual increase in the size of the fleet, and, though given no financial aid by the Federal Government, such as the cod fishery received, whaling soon took the lead among the fishing industries of the United States, the annual value of its products during the later years of this period amounting to considerably more than the value of the products of all the other fisheries combined. The demand for whale products at home and abroad grew so rapidly that, notwithstanding the rapid increase of production, prices tended to rise. The prices of

¹Macy, *History of Nantucket*, 150.

²Report of U. S. Commissioner of Navigation, 1910, p. 210.



MAP 7. FISHING GROUNDS OF THE GULF OF MAINE.
 (From McFarland's *History of the New England Fisheries.*)

sperm oil and whale oil were considerably higher in 1860 than in 1820, and the price of whalebone, which met with a constantly growing demand, advanced from 10 cents to about 90 cents a pound during the forty years.¹ Year after year the whaling fleet grew in tonnage; larger ships were used; better methods were employed; all parts of the sea were visited by the intrepid whalers; and millions of gallons of oil and millions of pounds of whalebone were brought home to the New England ports to be sold in domestic and foreign markets.

The documented tonnage of the whaling fleet of the United States, which had sunk to nothing in 1814, was 35,391 tons, gross tonnage, in 1820. Eleven years later it was 82,316 tons, and by 1841 it was 157,405 tons. From 1845 to 1860 it fell below 180,000 tons in only one year; several years it was more than 190,000 tons, reaching a maximum of 198,594 tons in 1858, and in 1860, when the period of decline was setting in, it measured 166,841 tons. From 1835 to 1860 the fleet averaged more than 600 vessels a year. The annual product averaged 118,000 barrels of sperm oil, 216,000 barrels of whale oil, and 2,324,000 pounds of whalebone, representing an average annual value of about \$8,000,000.² In the census of 1860, the value of the products of the whale fishery during 1859-60 was given as \$7,749,305.³

Until 1791 the operations of the deep-sea whaling vessels of the United States were confined to the Atlantic Ocean. In that year a half dozen Nantucket whalers sailed around Cape Horn into the Pacific Ocean in search of sperm whales.⁴ The voyages proved successful, and during the next few years several more vessels went to the new hunting-grounds. When whaling was resumed, after the war of 1812, the Pacific grounds were again sought out. For a time the Pacific whalers cruised only along the coast of Chile; but as whales became scarce in that region, voyages were made farther and farther into the Pacific, to both the southern and the northern parts of the ocean. By 1821 whaling-vessels reached the Japanese coast; not many years later the whaling-grounds along the northwest coast of North America were discovered; then the grounds along the Kamchatka and in the Okhotsk Sea were visited; and in 1848 a vessel from Sag Harbor made a successful trip into the Arctic Ocean. By 1835 most of the deep-sea whaling was carried on in the Pacific Ocean. Often the New England whaler would come home by the eastern route, sometimes cruising for a while in the Indian Ocean about the island of Madagascar or at the entrance of the Red Sea, to secure a possible addition to his cargo.

Throughout the long period of prosperity in the whaling industry, whale products constituted an important item in the foreign trade of the United States. Though the larger part of the oil was taken by the

¹Tower, *History of the American Whale Fishery*, 128.

²Goode, *Fisheries and Fishery Industries of United States*, sec. v, II, p. 170.

³U. S. Census 1860, *Miscellaneous Statistics*, 550.

⁴Tower, *History of the American Whale Fishery*, 43.

domestic market, millions of gallons of oil, as well as millions of pounds of spermaceti candles, were exported, and nearly all the whalebone was sold in foreign markets. New York and Boston were the important centers of the export trade. Until about 1840 the chief foreign markets for sperm oil were in the West Indies and South America, most of the whalebone exported went to France and the Hanse towns, and the exports of whale oil were sold chiefly to the Hanse towns, Holland, and Belgium. Afterwards England became the chief market for spermaceti, and also bought large quantities of whalebone, while the whale oil continued to be exported to the ports of northern Europe, to the West Indies, and to South America. For the two decades following 1840 the average annual exports of sperm oil exceeded 710,000 gallons, while those of whale and other fish exceeded 1,193,000 gallons; the quantity of whalebone exported was about 1,604,000 pounds.¹

With the exception of an occasional vessel from Philadelphia, Newark, or Wilmington, the whaling fleet of this period was made up of vessels from the ports of New England and New York, Massachusetts contributing by far the largest number. Of New York ports, Sag Harbor sent out the largest number of vessels, its largest fleet numbering 63 vessels, in 1846. The ports of Maine, though acquiring prominence in other fisheries during this period, took only a small part in the whale fishery and after 1845 abandoned it altogether. Portsmouth (New Hampshire) was a whaling port for a few years, but sent out only a small number of vessels. Rhode Island took a much larger share in the industry than either Maine or New Hampshire. There were as many as 25 whaling-vessels registered at one time from Warren, and Providence and Newport each had several vessels during the years in which the industry was at the height of its prosperity. In Connecticut, New London was the leading whaling port, usually standing next to New Bedford and Nantucket in the number of vessels registered. Mystic and Stonington also had small fleets.²

In Massachusetts the whaling industry flourished especially. Here the industry was started, and here it reached the highest stage of development. Dozens of Massachusetts ports had vessels engaged in whaling and thousands of Massachusetts people gained a livelihood from the industry. Of the many towns engaged in whaling, New Bedford was by far the most prominent, the vessels registered there usually composing, after 1840, about half of the entire whaling fleet of the nation. Before the Revolution the little town of Nantucket had been the leading whaling port, and during the early years of this period Nantucket had the largest whaling fleet of any New England port, but the shallowness of the water on the bar at the harbor entrance prevented the entry of the large whaling-vessels of 200 and 300 tons, which came into use

¹See *Commerce and Navigation of United States, 1840-1860*.

²Tower, *History of the American Whale Fishery*, 122.

during this period, and Nantucket was unable to maintain the lead. By 1830, New Bedford, with 66 vessels, was far in advance of its nearest rival; by 1840, New Bedford's fleet of 177 vessels was more than twice as large as that of Nantucket; and for the remainder of the period New Bedford, together with the other small towns near by—Fairhaven, Dartmouth, Westport, Mattapoisett, and Seppican—formed the center of the most extensive whaling operations ever carried on from any region in the world. After 1847, Nantucket, New London, Sag Harbor, and other ports began to decline as whaling centers, but New Bedford continued to develop until 1857, at which time its fleet numbered 329 vessels, valued at more than \$12,000,000 and employing over 10,000 seamen.¹

The closing years of this period marked the beginning of a decline of the whale fishery. Whales were becoming scarcer, the risk and danger involved in expeditions to Arctic latitudes made the chances of profit very uncertain, and the rapidly expanding manufacturing industries of New England offered a more favorable field for investment. Moreover, just as the production of whale oil began to fall off and its price was advancing, a new source of oil was found in the petroleum fields of Pennsylvania. For many years the countless barrels of oil brought home by the New England whalers had furnished light for many homes, streets, and lighthouses in America and Europe; but the whale-oil lamps and the spermaceti candles were soon to give way to illumination by kerosene, and whale-oil lubricants also were eventually to be displaced by other animal oils and by petroleum products. The prosperous days of the whalers ended when oil poured forth from the rocks beneath the surface of the earth at Titusville, Pennsylvania.

THE COD FISHERY.

In Chapter IX it has been noted that the cod fishery in 1789, though it had partially recovered from the effects of the long suspension of the industry during the Revolutionary War, was by no means as profitable as it had been during colonial days. When the new Government imposed import duties on molasses, rum, hooks and lines, lead, cordage, duck, hemp, twine, and other articles used extensively by the fishermen, the small margin of profit was almost entirely extinguished. Appeals from the members of Congress from New England caused a reduction of the duty originally proposed on molasses and also secured the insertion in the tariff act of a clause allowing, in lieu of a drawback of the duty on salt used in curing fish, a bounty of 5 cents on every quintal of dried fish and a like amount on every barrel of pickled fish exported abroad.² The relief afforded by these bounties was not adequate to offset the losses occasioned by the increased cost of salt

¹Tower, *History of the American Whale Fishery*, 54.

²*U. S. Statutes at Large*, I, 27.

and other fishing equipment; moreover, as was pointed out by some Marblehead fishermen, the bounty on exports did not usually afford relief and assistance to the men actually employed in fishing.¹ So unprofitable did fishing for cod become that, in 1790, 33 vessels of Marblehead were withdrawn from service.¹ The General Court of Massachusetts sent a memorial to Congress calling attention to the low state of the industry and asking further relief. The memorial was referred to Thomas Jefferson, then Secretary of State, who, in 1791, made a report to Congress in which he recited the facts presented in the memorial, enumerated the advantages possessed by American fishermen, and called attention to the disadvantages imposed upon them by the provisions of the tariff law of 1789.²

Congress, realizing the inadequacy of the previous measure for relief from the burden of the salt duty, in February 1792 enacted a law which would afford assistance directly to the fishermen.³ The bounties on the exportation of dried and pickled fish were discontinued, and the drawback of the duty on imported salt was commuted to allowances to the owners and crews of the vessels engaged in the cod fishery. The allowances were proportioned in accordance with the amount of salt likely to be used on the various vessels. Craft of from 5 to 20 tons received each year \$1 per ton; those between 20 and 30 tons received \$1.50; and those above 30 tons received \$2.50, the maximum annual allowance for a single vessel not to exceed \$170. To be entitled to the allowance the vessel had to be engaged in the cod fishery at least 4 months during the regular season, which extended from the last of February to the last of November. Three-eighths of the allowance was paid to the owner of the vessel, and the remainder was divided among the crew in proportion to their individual catch of fish.

In May 1792, because of the passage of an act fixing a bushel of salt for the payment of duty at 56 pounds, although a bushel was by measurement usually from 70 to 80 pounds, the allowances were increased 20 per cent, and at the same time a bounty of 8 cents was granted on every barrel of pickled fish exported.⁴ When in 1797 the duty on salt was raised from 12 cents to 20 cents a bushel, the bounty on exports of pickled fish was increased to 12 cents a barrel, and the rate of allowances to vessels engaged in the cod fishery was increased one-third, or to amounts ranging from \$1.60 to \$3.50 per ton per year, with a maximum annual allowance of \$272 to a single vessel.⁵ In 1807, when the duty on salt was removed, the bounties and allowances were both discontinued,⁶ but when in 1813 a duty of 20 cents a bushel was again placed on salt, the system of bounties and allowances was reestablished;⁷ 20 cents was paid on every barrel of pickled fish exported, provided it

¹American State Papers, *Commerce and Navigation*, I, 15.

²*Ibid.*, 8.

³*U. S. Statutes at Large*, I, 229.

⁴*Ibid.*, 260.

⁵*Ibid.*, 533.

⁶*Ibid.*, II, 436.

⁷*Ibid.*, III, 49.

had been cured with imported salt upon which the duty had been paid, and the scale of allowances fixed by the act of 1797 was restored. The duty on salt and the allowances were to continue for one year after the conclusion of peace with England, but by a subsequent act they were continued without limitation.¹ In 1819 the rate of allowances was again raised, because it was thought the amounts previously paid were not large enough to constitute a drawback of the entire duty on the imported salt used in the cod fishery.²

By the act of 1819 the following rates were established: On vessels measuring from 5 to 30 tons, \$3.50 per ton; on vessels measuring more than 30 tons, if employed in the cod fishery at least 4 months during the year, \$4 per ton; on vessels measuring more than 30 tons, having a crew of not less than 10 persons and employed at sea exclusively in the cod fishery for $3\frac{1}{2}$ months during the year, \$3.50 per ton. Vessels on which allowances were paid under this law had to be inspected as to seaworthiness, equipment, and the number and nationality of their crews. The master and three-fourths of the crew must be citizens of the United States. Fishermen on the vessels were to be paid by division of fish or by a share in the proceeds of the sale of the fish caught. A regular log-book had to be kept day by day, arrivals and departures had to be recorded with the proper Government officials; the time the vessel must be employed at sea was 4 months, though it did not have to be in continuous voyage; and if the vessel measured over 30 tons it was entitled to a certain allowance if at sea only $3\frac{1}{2}$ months. In 1830 the duty on salt was reduced to 15 cents a bushel;³ it fell to 8 cents a bushel by 1842,⁴ and was changed to 20 per cent ad valorem in 1846, the duty amounting thereafter to less than 2 cents per bushel.⁵ Notwithstanding the reduction of the salt duty, the allowances to vessels engaged in the cod fishery were continued. Several attempts were made to secure their repeal or modification, both because of the reduction of the salt duty and because of changes in the fishery which helped further to make the amounts of the allowances proportionately larger than the sums paid as salt duties, but it was not until 1866 that the system was discontinued. The bounty on exports of pickled fish was replaced in 1846 by a drawback of the duty on foreign salt used in preparing fish for export.

The assistance given by the Federal Government and the increased range of foreign markets proved beneficial to the cod fishery. From about 25,000 tons in 1790⁶ the gross tonnage of the New England fleet grew to 42,746 tons in 1798. Trouble with France and England caused a temporary depression from 1799 to 1801, but by 1802 the

¹*U. S. Statutes at Large*, III, 254.

²*Ibid.*, 520.

³*Ibid.*, IV, 419.

⁴*Ibid.*, V, 548, sec. 4.

⁵*Ibid.*, IX, 42, sec. 3.

⁶In 1790, the tonnage of the cod, whale, and mackerel fleets combined was 28,348 tons. The figures given for 1798 were for the cod and mackerel fisheries. The mackerel fleet at that time was unimportant. *Report of U. S. Commissioner of Navigation, 1910*, p. 211.

tonnage was as large as it had been in 1798, and by 1807 it had increased to 70,306 tons. The embargo and non-intercourse acts caused another depression, and though the tonnage figures for 1811 (43,234) indicated a partial recovery of the industry, the war with England intervened, not only putting a stop to further development, but causing the tonnage to shrink to the lowest point ever recorded since the establishment of the Federal Government. After the war recovery was rapid, the gross tonnage rising to 76,078 tons in 1819, the highest point reached up to that time. From 1820 to 1860 the cod fishery was generally prosperous, and though there were occasional periods of slight depression, the industry on the whole showed a gradual and steady development. The highest tonnage ever employed in the cod fishery was for the year 1860, when it reached 136,654 tons, gross tonnage.¹

During the war of 1812 the visits of the New England vessels to the northern fishing-grounds were discontinued. After peace was established the British authorities in Canada tried to prevent the resumption of this branch of the fisheries by the vessels of the United States. It was asserted by the British Government that, because of the war of 1812, the citizens of the United States had forfeited the privilege given them by the treaty of 1783 to fish in waters under British jurisdiction. The United States Government, however, claimed that the rights and liberties in regard to the fisheries bestowed by the treaty of 1783 were held by the same tenure as the political independence of the United States, which had been granted by the same treaty, and that the former had not been abrogated by the war of 1812 any more than the latter had been forfeited. In the negotiations leading to the Treaty of Ghent the commissioners of the two countries were unable to come to an agreement respecting the fishing rights each was to retain, and the treaty was eventually concluded without any reference being made to the subject. In 1815, British naval authorities, in pursuance of the policy adopted by their Government, seized several fishing-vessels of the United States and took them to Halifax. The vessels were soon released, and when President Monroe protested vigorously against the seizure the British Government disavowed the act. The affair indicated the need of a definite settlement of the fisheries question and negotiations were opened which led to the convention of 1818. By this convention the United States surrendered the right to participate in some of the inshore fisheries along parts of the coast of British possessions in America, but secured greater facilities for drying and curing fish than had been granted by the Treaty of Paris. However, the con-

¹Tonnage in the cod fishery by decades, 1820 to 1860:

Year	Tonnage	Average annual tonnage by decades, 1830 to 1860:	Average
1820.....	60,842 tons.	1830-40.....	65,100 tons.
1830.....	61,554 tons.	1840-50.....	68,200 tons.
1840.....	76,035 tons.	1850-60.....	101,300 tons.
1850.....	85,646 tons.		
1860.....	136,654 tons.		

Commerce and Navigation of the United States, 1860, p. 670. Statistics for 1820 include cod and mackerel fisheries.

vention, though adjusting the differences between the two countries for a time, did not enter into details sufficiently to afford a basis for settling questions which arose later, and it was not many years before new disputes made necessary the negotiation of another treaty. The convention of 1818 marked the beginning of the history of the "fishery question," which subject will be discussed in a separate chapter.

The cod continued throughout this period to be the most important food-fish taken from American waters. There are no statistics of the quantity caught annually, but the gradual increase of the size of the fishing-fleet indicated that the amount grew constantly. In 1859 the value of the products of the New England cod fishery was about \$3,000,000.¹ The exports of dried fish reached a maximum of 567,828 quintals in 1804, and though the catch of subsequent years was much larger, the growth of domestic consumption caused a decline in the volume of exports. From 1790 to 1807 the chief foreign markets were Spain, France, Portugal, and the West Indies, but thereafter the exportation of dried codfish to Europe gradually declined until about 1832, after which it practically ceased, leaving the West Indies the only foreign market of any consequence. The exports of fish during the opening year of each decade from 1830 to 1860 are stated in table 63.

TABLE 63.—Exports of domestic fish.¹

Year.	Dried and smoked.		Pickled.		
	Quantity.	Value.	Bbls.	Kegs.	Value.
1830	<i>quintals.</i> 229,796	\$530,690	66,113	6,723	\$225,987
1840	211,628	541,058	42,274	2,252	179,106
1850	<i>cwt.</i> 168,600	365,349	19,330	1,228	91,445
1860	219,628	690,088	33,815	2,433	191,634

¹Compiled from *Commerce and Navigation of the U. S.*, 1830-1860.

Massachusetts and Maine were the leading States in the cod fishery, though New York and the other three coast States of New England had small cod-fishing fleets. The cod fishery of Maine gradually increased during this period, until in the last decade it passed that of Massachusetts. Many new settlements were planted along the Maine coast after 1789, and from Kittery to Calais there was not a single village or town where a fishing industry of some kind was not vigorously pursued. Portland and Castine became centers for fitting out fishing-vessels, as many as 500 being equipped annually at Castine in 1850.² Massachusetts, though retaining the lead as a fishing State and dominating the whale and mackerel fisheries, fell to second place in the cod fishery. The output of the cod and mackerel fisheries of Massachusetts

¹U. S. Census 1860, *Miscellaneous Statistics*, 550.

²McFarland, *History of the New England Fisheries*, 180.

in 1859 had a value of about \$2,600,000 as compared with a value of \$1,009,000 for the output of the cod and mackerel industries of Maine.¹ In Massachusetts, too, practically every coast town possessed valuable fishing interests. Marblehead, which had been the leading fishing port of Massachusetts for a number of years before the Revolution, declined relatively in importance during the period. After 1818 Gloucester gradually came to the front as a fishing center, and before the end of the period led all the fishing ports of the United States. The value of the products of the Gloucester fishing industries in 1859 was \$1,277,000, nearly half of the entire output of Massachusetts, exclusive of the product of the whale fishery. The fishing fleet of Gloucester in that year contained 301 schooners, employing over 3,500 men and boys.² Newburyport held a position of importance in both the cod and mackerel fisheries, and Beverly maintained a number of vessels in the cod fishery. Boston remained the important center of the fish trade, and also furnished a large part of the equipment for the fishing-vessels of Massachusetts and the other New England States.

TABLE 64.—Estimated number, tonnage, and persons employed in crews in cod fishing in 1853.¹

State.	No. of vessels.	Tonnage of vessels.	No. of persons in crews.
Maine.....	1,269	63,477	8,883
Massachusetts.....	1,138	56,919	7,966
Connecticut.....	125	6,228	875
New Hampshire.....	43	2,137	301
Rhode Island.....	10	475	70
New York.....	8	401	56
Total.....	2,593	129,637	18,151

¹McFarland, *History of the New England Fisheries*, 171.

THE MACKEREL FISHERY.

Previous to 1819, the mackerel fishery of the United States was relatively unimportant, the total recorded product of the industry for the 15 years preceding that date being only about 235,000 barrels.³ Before that year, the fish were used largely as bait for cod, and those which were caught for food were taken fresh to market. The first trip for mackerel to salt on board the vessel taking them was made in 1818. Thereafter the mackerel fishery developed rapidly, and in 1831 about 450,000 barrels were salted in Maine, New Hampshire, and Massachusetts.⁴ After 1831 the industry declined for a time, but about 1840 it began to revive and continued to be prosperous for the greater part of the next 20 years. The mackerel fishery is always subject to great fluctuations. Unlike the cod, the supply of which is fairly uniform, the mackerel are found in widely varying quantities and in different localities from season to season. The purse-seine did not come into general

¹U. S. Census 1860, *Miscellaneous Statistics*, 550.

²McFarland, *History of the New England Fisheries*, 194.

³*Ibid.*, 142.

⁴*Ibid.*, 171.

use for catching mackerel until late in the century, and as long as the fish had to be caught with hook and line, the quantity taken in some years was small, because of the refusal of the fish to bite. One example of the fluctuations which sometimes occurred is shown in the statistics of the Massachusetts fishery in 1859 and 1860, the product for the former year being 99,715 barrels and that for the latter 235,685 barrels. The average catch of mackerel from 1820 to 1860 was about 200,000 barrels a year.¹

The gross tonnage of the mackerel fleet of the United States in 1830, the first year in which statistics of its tonnage were separately recorded, was 35,973 tons.² In 1840, when the product of the fishery was at one of the lowest points, the fleet measured 28,269 tons, but by 1850 it had risen to 58,111 tons.² The maximum tonnage for the period was reached in 1849, when it amounted to 73,853 tons; in 1852, it was 72,546 tons. The poor season of 1859 was reflected in the diminution of the fleet to 26,110 tons in 1860.²

Massachusetts possessed by far the largest part of the mackerel industry throughout the entire period. Maine had a mackerel fleet, but the mackerel fishery of that State failed to grow as rapidly as its cod fishery. Fishermen of New Hampshire also engaged in the mackerel business, but only on a small scale. In Massachusetts, Boston was the leading mackerel port almost continuously until 1840, when Gloucester took the lead and has ever since retained it. Newburyport engaged extensively in both the mackerel and the cod industries; Wellfleet had an important interest in the mackerel fishery, usually ranking next to Gloucester and Boston after 1845; and Hingham, Cohasset, and Provincetown each held high rank in the quantity of mackerel taken and cured.³

HERRING, HALIBUT, MENHADEN, OYSTER, AND LOBSTER FISHERIES.

The period from 1789 to 1860 marked the beginning of several important fisheries in New England, some of which in subsequent years were to exceed in extent the long-established cod and mackerel industries.

The herring fisheries in the vicinity of the Magdalen Islands were extensively developed, and many fishing towns along the Maine coast from the Penobscot to the St. Croix produced large quantities of smoked and pickled herring. Between 1845 and 1865 there were pickled annually at Lubec from 400,000 to 500,000 boxes of smoked herring; Eastport, Millbridge, Hancock, and several other towns also engaged extensively in the business of catching and curing herring.⁴

As early as 1819 halibut were found at George's Bank, though it was not until about 1830 that the business of catching this fish for market was started in a regular manner. Halibut were usually brought

¹MacFarland, *History of the New England Fisheries*, 172.

²*Commerce and Navigation of the United States, 1860*, p. 670.

³MacFarland, *Ibid.*, 187. ⁴*Ibid.*, 178.

to port alive and packed in ice for shipment. The extreme risk involved in the fishery, which was carried on only in midwinter, tended to discourage its development, though by 1851 Gloucester employed about 75 vessels in it.¹ The catch that year was valued at upwards of \$60,000. The hake fishery of Frenchman's Bay was also developed to some extent between 1840 and 1860, and considerable quantities sold at Portland and Boston.² Shad fisheries were carried on locally in nearly all the important New England rivers.

The menhaden oil and fertilizer industries also started during this period. The use of fish as fertilizer began at a very early period in colonial history. For a long time food-fish, such as the alewife and shad, were employed for this purpose, but as these fish grew in value the bony "mossbunkers" or white-fish, as the menhaden were usually called, were introduced as fertilizing material, and the farmers along the coast caught them in large quantities to spread over their fields. As early as 1812 the inhabitants of Rhode Island began to use various fish oils as substitutes for more expensive paint oils.³ By 1830 the process of extracting oil by steam-cooking and pressing the fish was brought into use. By 1850 there were a number of small establishments along the New England coast engaged regularly in manufacturing menhaden oil, and the introduction of the purse-seine for catching the fish about that time greatly stimulated the industry. At first the refuse part of the menhaden, from which the oil had been pressed, was thrown away, but it was soon discovered that it could be used as fertilizer just as the entire fish had been used. The possibility of securing two useful products by the same process enhanced the commercial importance of the menhaden and opened the way for a great development of the menhaden fishery.

The practice of transplanting oysters from Chesapeake Bay to the shore waters of Rhode Island and Connecticut was begun about 1840. The value of the oyster fishery of Connecticut in 1860 was about \$610,000.⁴ Fair Haven, Connecticut, was one of the first places in New England to which oysters were transplanted, the seed oysters being secured first from New Jersey and later from Virginia.⁵ So large did the oyster business at Fair Haven become that some of the establishments maintained branch houses in cities as far west as St. Louis and Chicago.

The lobster fishery began to assume a position of commercial importance about 1830, when vessels from Boston began to make regular trips to the Maine coast to secure supplies of fresh lobsters. In 1843 the business of canning lobster was started in Maine.⁶ By 1860 the industry had developed to an extent sufficient to indicate that it would eventually take a high rank among the domestic fishing industries.

¹Sabine, *Report on Principal Fisheries* (House Exec. Doc. No. 23, 32 Cong., 2 sess., p. 373).

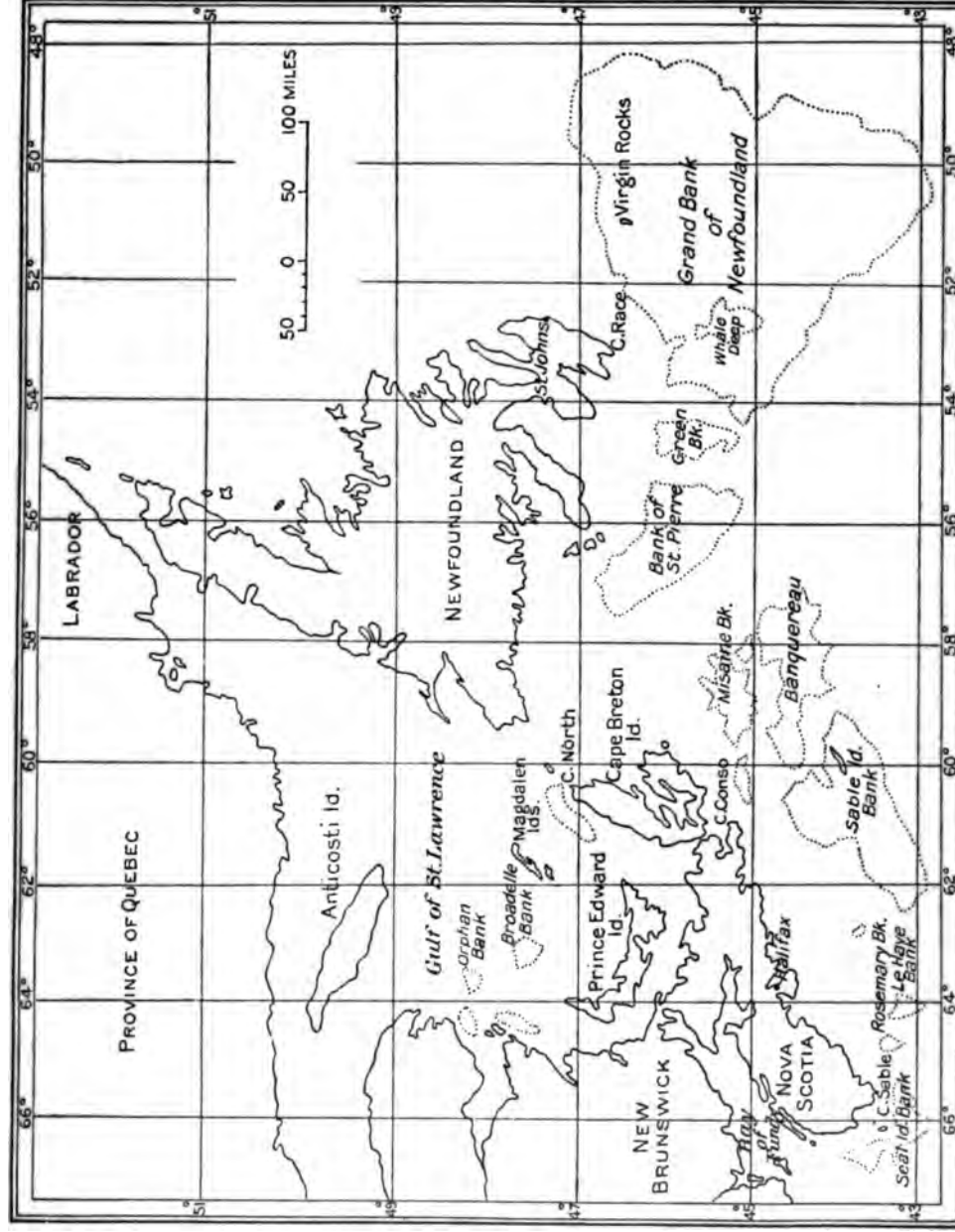
²McFarland, *History of the New England Fisheries*, 179.

³Goode, *Fisheries and Fishery Industries of the United States*, sec. v, I, 366.

⁴U. S. Census 1860, *Miscellaneous Statistics*, 551.

⁵McFarland, *History of the New England Fisheries*, 197.

⁶*Ibid.*, 232.



MAP 8. FISHING GROUNDS OF NEWFOUNDLAND, CAPE BRETON ISLAND, GULF OF ST. LAWRENCE, AND NOVA SCOTIA.

(From McFarland's History of the New England Fisheries.)

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CHAPTER XXXII.

THE FISHERIES OF NEW ENGLAND SINCE 1860.

Development and conservation of the fisheries of the United States since 1860, 169. The change in the relative importance of fish products, 170. The whale fishery, 1860 to 1910, 171. Destruction of whaling vessels during Civil War, and subsequent decline of the whaling industry, 171. Cod and mackerel fisheries, 1860-1910, 173. Tonnage of vessels in the cod and mackerel fisheries, 1870-1910, 174. The herring, shad, squeteague, and menhaden fisheries, 175. The shellfish fisheries, 177.

There has been since 1860 an extensive development of the various fisheries of the United States. The increase in population, the growth of the transportation system, and the introduction of improved methods of preserving and transporting the products of the fisheries have greatly increased the extent and range of the market for food-fish and permitted the exploitation of all the fishing resources of the country, many of which, before 1860, were of little commercial importance. With the development of the inshore fisheries of the Atlantic coast, the lake fisheries, and the Pacific coast fisheries, there has been a decline in the deep-sea fisheries, which were for many years such a vital factor in the commercial life of New England; but notwithstanding the decline of these long-established industries, there has been a steady advance in the fishing industry as a whole, and even in the New England States, which have always held a practical monopoly of deep-sea fishing, the total products of the fisheries are as great now as at any previous time.

Though the fishing industry has developed greatly during the past half century, it no longer occupies the important position which it once held in the commercial and economic life of the nation. Compared with the value of the product of manufacturing, agriculture, or mining, the annual value of the products of the fisheries is small. Once listed among the leading exports of America, the products of the fisheries make up at the present time less than 0.5 per cent of the total value of exports; and for nearly a score of years the imports of fish into the United States have exceeded the exports. In New England, where throughout the eighteenth century and the early part of the nineteenth century, commercial prosperity depended largely on the fisheries, to-day dozens of factories have an annual output of greater value than the annual product of all the fishing industries of that section. At one time the whale, cod, and mackerel fleets of the New England States formed as much as a fourth of the tonnage of their merchant marine; to-day they make up less than one-fiftieth.

Like the other natural resources of the United States, the fisheries have been used in a wasteful manner, but fortunately a policy of conservation was adopted before they were exhausted, and if the present method of caring for and replenishing this portion of the natural wealth

of the country is continued, all the important fisheries may in time be restored to their original abundance. One of the most notable features of the history of the fisheries has been the conservation work of the Federal and State governments. Thorough and careful studies of the various fisheries have been made, regulative measures have been adopted to prevent useless destruction, economical methods of utilizing the products have been worked out, and fish-culture on a large scale has been resorted to for the purpose of increasing the supply of many varieties of food-fish.

A comparison of the statements issued from time to time during recent years by the Bureau of Fisheries and the Census Office shows that there has been a continuous and steady growth in the quantity and value of the fishery products. Table 65 shows the increase in the value of the products of all the fisheries of the United States, not including Alaska and other outlying possessions, in the years designated.¹

TABLE 65.—*Value of products for selected years 1880-1898.*

1880.....	\$39,885,000
1889.....	42,780,000
1900-1904.....	¹ 49,398,000
1908.....	54,031,000

¹Combined statistics for various sections of the country, compiled in different years between 1900 and 1904.

These values are for the catch of fish as brought to market, either cured or fresh, by those who took them. In many instances the fishery products constituted the basis of manufacturing industries with products of considerable value. The output of the industry designated in the census reports as "canning and preserving fish" increased in value from \$10,233,000 in 1890 to \$28,401,000 in 1908.²

An interesting feature of the history of the fisheries during the past several decades has been the change in the relative importance of various products. Until 1850 practically the only fisheries of any commercial significance were the whale, cod, and mackerel fisheries. In 1908 the oyster product led all species of fish in value, the quantity marketed having a total value of \$15,713,000, amounting to 29 per cent of the value of all fishery products.³ The nearest rival of the oyster was the salmon, but the catch of salmon, valued at \$3,347,000, made up only 6 per cent of the total product.⁴ These two were the only species having a value greater than \$3,000,000. Cod, ranking third in the list, had a value of \$2,914,000, and of each of seven other species—shad, lobster, clams, squeteague, halibut, haddock, and German carp—the catch amounted in value to more than \$1,000,000.

¹U. S. Census Report, *Fisheries of the United States, 1908*, p. 10.

²*Ibid.*, 280.

³*Ibid.*, 24.

⁴*Ibid.*, not including the salmon product of Alaska.

Whale oil and whalebone, once the leading fishery products of the United States, made up less than 1 per cent of the total value, codfish but 5 per cent, and mackerel only 2 per cent.

In New England the fishing industry as a whole has continued to develop since 1860, and Massachusetts still holds the distinction of outranking all other States in the value of fishery products. However, with the rise of fishing industries in other sections of the United States, the New England fisheries have lost the lead which they held so long. Moreover, there has been a notable change within New England itself. The deep-sea fisheries, which were once all-important, have lost precedence to the inshore fisheries, and the whale fishery has almost reached the point of extinction.

THE WHALE FISHERY, 1860 TO 1910.

The history of the whale fishery of the United States since 1860 presents a record of steady and almost uninterrupted decline. Dr. Walter S. Tower, in his *History of the American Whale Fishery*, page 72, says:

"Practically no other industry in the country can present any parallel to the revolution that the whale fishery has undergone in the space of sixty years. From a business representing an invested capital of tens of millions of dollars, and giving employment to tens of thousands of men, it has fallen to a place where whaling is no longer of any great importance even to the communities from which it was carried on. In fact, whaling is kept alive at all only by the demand for a product which a century ago was regarded as hardly worth saving."

Petroleum products have largely but not entirely displaced whale-oil products for purposes of lubrication, and the price of whale oil is much lower than it was during the prosperous days of whaling, notwithstanding the fact that the production is much smaller. The price of whalebone, however, has greatly increased, and the high value of this article is the only thing that enables the whale fishery to continue at all. Often during recent years only the bone has been saved from the carcasses of captured whales, the remainder being cast adrift, if other whales were in sight.

During the Civil War the whale fishery suffered disastrously from the depredations of southern commerce destroyers, at least 50 whaling-vessels being captured and destroyed. The *Shenandoah*, one of the most famous of the privateers, entered Bering Sea late in the war and took 29 vessels, of which all but 4 were burned and sunk. This wholesale destruction and the risk involved in whaling voyages caused a rapid diminution of the whaling fleet, many vessels being sold to the Government and many being transferred to other branches of the merchant marine. From 166,841 tons in 1860 the tonnage of the registered vessels engaged in the whale fishery fell to 84,233 tons in 1865, a decrease of practically one-half in 5 years.¹

¹Report of U. S. Commissioner of Navigation, 1910, p. 212.

Just after the close of the war there was a revival of whaling, but it was only temporary. The condition which had caused decadence to set in even before the war commenced, the growing uncertainty of the business, the development of manufacturing, and the competition of petroleum products, operated with increasing force to hasten the decline of the industry. In 1866 the registered tonnage rose to 105,170 tons, but the following year it was less than half that amount. There was an increase to 78,486 tons in 1868, and after that year there was a steady and continuous decline. In 1871, 34 fishing-vessels of the Pacific fleet were destroyed by the closing of the ice-pack in the Arctic Ocean, and a similar disaster destroyed a large number of vessels in 1876. The decline of the whaling industry since 1860 is shown in table 66, which gives the registered tonnage of the entire whaling fleet of the United States at ten-year periods.¹

TABLE 66.—*Number and tonnage of the whaling fleet, by decades, 1860 to 1910.*

Year.	Registered. (Number.)	Vessels. (Gross tonnage.)	Year.	Registered. (Number.)	Vessels. (Gross tonnage.)
1860	...	166,841	1890	76	18,633
1870	299	67,954	1900	42	9,899
1880	174	38,408	1910	36	9,308

During the prosperous era of whaling there were more than 50 New England ports, as well as several ports in the States south of New England, at which whaling vessels were registered. By 1880, Massachusetts and Connecticut were the only States on the Atlantic coast possessing whaling fleets. One by one the whaling ports of these States dropped from the list, and the number of vessels registered at the other ports steadily decreased. From Nantucket, where American whaling received its start, the last whaling vessel went out in 1869.² At New Bedford, where whaling was carried on before the war on such a magnificent scale, the fleet dwindled from 300 vessels in 1860 to 20 vessels in 1910.³ In the latter year the only other port on the Atlantic coast at which whaling vessels were registered was New London, which had 2 sailing-vessels, of a total tonnage of 482 tons. In 1869 San Francisco became a whaling port, and being near the principal whaling-grounds, it possessed a decided advantage over the Atlantic ports, and a large part of the New England interests was transferred to the Pacific coast. Even in San Francisco, however, whaling reached the climax of prosperity about 1892, and since then has steadily declined. In 1910 there were 14 whaling vessels registered there—5 sailing and 9 steam—of a total gross tonnage of 4,720 tons, approximately one-half of the tonnage belonging to the whole country.⁴

¹*Report of U. S. Commissioner of Navigation, 1910, p. 212.*

²Tower, *History of the American Whale Fishery*, 69.

³*Report of U. S. Commissioner of Navigation, 1910, p. 207.*

⁴The value of whale products taken by vessels of the United States was as follows during the years designated: 1880, \$2,324,000; 1889, \$1,404,000; 1899, \$722,000; 1908, \$497,000. U. S. Census Report, *Fisheries of the United States, 1908*, p. 77

COD AND MACKEREL FISHERIES, 1860 TO 1910.

The cod and mackerel industries of New England reached the point of maximum development during the early years of the Civil War, the tonnage of vessels engaged in both fisheries in 1862 amounting to 204,197 tons, the highest figure recorded during their history. Though these fisheries have not undergone such a decline as the whaling industry has suffered, they have diminished in importance and for several decades have not held the commanding rank among the fisheries that they once possessed. By 1866 the tonnage of the vessels engaged in the cod and mackerel industries had fallen to 98,231 tons, and though the fisheries remained fairly prosperous for a score of years, they failed to regain their former state of prosperity, the fleet reaching a gross tonnage of more than 100,000 tons in only one year (1873). Since 1885 the deep-sea fishing industry has suffered a marked decline. The rapid increase of the production of cheaper kinds of food-fish, such as oysters, salmon, sardines, herring, and shad—cheap because of the small expense incurred in taking and preparing them for market—caused a lessened demand for the costly deep-sea fish which for so long were standard. Many of the ports of Maine and Massachusetts, which for over a century possessed large numbers of schooners and other fishing-vessels making regular trips to the Grand Banks off Newfoundland and Nova Scotia, have abandoned deep-sea fishing altogether, and their fishermen have turned their energies to the development of the inshore fisheries, finding the business of supplying fresh fish to the visitors who flock to the numerous summer resorts along the New England coast more profitable than the dangerous off-shore voyages to the distant fishing-banks. In Maine, which was the leading State in the cod fishery for a decade before the Civil War, there is now only one port engaged in the bank fishery. In Massachusetts practically all of the deep-sea fishing is carried on by vessels from Gloucester and Boston. The tonnage of the deep-sea fishing fleet has been steadily diminishing for more than a score of years. Since 1890, however, the number and tonnage of small craft employed in taking ground-fish near the shore has gradually increased and the product of the cod fishery has not been greatly diminished since that year and, in fact during recent years has usually shown a substantial annual increase. The statistics presented in table 67 of the cod and mackerel fleet at ten-year intervals since 1870 give a good idea of the state of those fisheries during this period:¹

¹These statistics are for the cod and mackerel industries of the entire country. Over 90 per cent of the fleet belongs to the New England States. *Report of U. S. Commissioner of Navigation, 1910*, p. 213.

In 1908 the total catch of codfish in the United States amounted to 110,054,000 pounds, valued at \$2,914,000.¹ Massachusetts contributed 66 per cent of the total, Maine 18 per cent, and Rhode Island and Connecticut each a small amount. Compared with the product of 1902, the catch of cod in 1908 showed an increase of 12,000,000 pounds; the product in 1888 was 120,000,000 pounds. Of the other important varieties of ground-fish (the halibut, haddock, hake, and pollock, which like the cod are caught almost entirely with hook and line), the catch of the entire United States in 1908 was valued at \$3,726,000, of which about two-thirds was credited to New England.² The mackerel industry in 1908 ranked fifteenth among the fisheries in respect to value of product, the total catch for the year amounting to 12,103,000 pounds, valued at \$848,000. Of the total catch of 1908, Massachusetts had 86 per cent, and Rhode Island, Maine, and Connecticut about 8 per cent.³ Compared with the catches of former years, that of 1908 showed a great decline, being the smallest quantity taken in a single year since 1898.

TABLE 67.—*Number and gross tonnage of vessels engaged in the cod and mackerel fisheries, by decades, 1870-1910.*

Year.	Enrolled vessels.		Licensed vessels.		Total.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
1870	1,561	82,612	731	8,848	2,292	91,460
1880	1,147	64,935	1,176	12,603	2,323	77,538
1890	840	61,507	619	6,860	1,459	68,367
1900	545	43,694	890	7,935	1,435	51,629
1910	395	39,079	837	8,212	1,232	47,291

A notable change in the ground-fish and the mackerel industry during recent years has been the decrease in the quantity of salted fish and a corresponding increase in the quantity of fresh fish marketed. Previous to 1860 practically all the codfish taken were cured before being taken to market. In 1888 one-third of the total catch was marketed fresh, and in 1908 only one-fourth of the catch was cured before being sold.⁴ An even greater proportion of the mackerel is brought to market in a fresh state. Practically all the fish of all kinds caught near the shore and a large part of those taken by the deep-sea fishing-vessels are now carried fresh to market. The introduction of gasoline engines in the small craft employed in the inshore fisheries has greatly stimulated the growth of the fresh-fish industry in recent years. On the deep-sea vessels the fish are preserved in ice until port is reached.

¹U. S. Census Report, *Fisheries of the United States*, 1908, p. 53.

²*Ibid.*, 62.

³*Ibid.*, 53.

⁴*Ibid.*, 56, et seq.

THE HERRING, SHAD, SQUETEAGUE, AND MENHADEN FISHERIES.

Though of less value than shellfish, cod, or mackerel, the herring, shad, squeteague, and menhaden are important fishing-products of New England.

The herring fishery has been prosperous throughout the period since the Civil War, the total amount of herring taken in the United States rising from 43,000,000 pounds in 1880 to 125,000,000 pounds in 1908. Maine has always led in the herring fishery, and in 1908 was credited with about three-fourths of the catch, the only other important State being Massachusetts, with 23 per cent of the total quantity taken.¹ Three industries, the frozen-herring industry, the smoking and pickling of herring, and the canning of sardines arise from the extensive herring fishery. Frozen herring have been used for more than half a century as bait for ground-fish, and as the deep-sea fisheries have prospered or declined, the frozen-herring industry has arisen or fallen in importance. For more than a score of years after the Civil War a large number of vessels visited each winter the shores of Newfoundland and Nova Scotia to secure herring to be frozen and sold to the New England deep-sea fishermen. Since 1881, the Nova Scotia frozen-herring trade has dwindled away, but a small fleet of vessels still goes to the west coast of Newfoundland, the Bay of Islands being the chief point of its operations.

The smoked and pickled herring industry, as before 1860, centers around Lubeck and Eastport, in Washington County, Maine, where several million pounds of herring are prepared each year. By far the largest part of the herring used in this branch of industry come from the Passamaquoddy region, the fish no longer visiting the waters around the Magdalen Islands, as in former years.

The most important branch of the herring industry, and at the same time one of the leading fishery industries of the United States, is sardine canning. The practice of using small herring taken along the Maine coast as a substitute for the European sardine began in 1875, when the first sardine cannery established in the United States was put up at Eastport. Maine has always held a virtual monopoly of the sardine-canning business. Ten years after the first cannery was erected, there were 30 canneries in the State, turning out a product valued at more than \$1,000,000. In 1900 the value of the sardine product of Maine was more than \$4,000,000, and in 1908 the canneries of that State produced 68,216,000 pounds of sardines, valued at \$4,732,000. The product of the Massachusetts establishments in 1908 was 2,322,000 pounds, valued at \$369,000.²

The shad fishery is one of the most valuable fisheries of the United States, ranking next to the oyster, salmon, and cod fisheries. Most of the shad are taken from the rivers of the Middle and South Atlantic

¹U. S. Census Report, *Fisheries of the United States, 1908*, p. 58.

²*Ibid.*, 284.

States, however, and the quantity caught in New England is relatively small, the catch in 1908 being valued at less than \$75,000.¹ Like the salmon, the shad is anadromous, spending most of its life in the ocean and ascending the rivers for the purpose of spawning. The largest part of the New England catch of shad comes from the rivers of Maine and Connecticut. In many New England rivers the shad, as well as other species of anadromous fish, have completely disappeared on account of the construction of impassable dams and the pollution of the water with refuse matter from manufacturing plants. During the past few decades both the Federal Government and the State governments of New England have taken steps toward the conservation of the shad. Fishways have been erected to permit their passage over the dams to their spawning-grounds, the season for catching the fish has been limited, and fish hatcheries have been established for the artificial propagation of young shad to be planted in the large streams.

The alewife or river herring is another anadromous fish that is found in large numbers all along the Atlantic coast. It ranked twenty-first in value among the fishery products in 1908. Like the shad, it is found in greater abundance in the rivers of the Middle Atlantic States than in those of New England, but it has formed an important part of the local supply of food-fish in New England since colonial days, and considerable quantities are still brought fresh to the Boston fish markets. This species is also used as bait for deep-sea fish, and in Connecticut many hundreds are salted for the export trade. The total catch of alewives in New England in 1908 was valued at \$81,000, one-half of which was contributed by Massachusetts.²

During the last half century the weakfish or squeteague has steadily advanced to a position of considerable importance among the fishery products of the United States. In 1908 this species ranked seventh in value, the catch for the year amounting to 50,000,000 pounds, with a value of \$1,776,000. Most of the squeteague taken are caught along the shores of New Jersey and Delaware, but in each of the New England States south of New Hampshire a considerable number are taken each year. The catches of Rhode Island and Massachusetts in 1908 were valued, respectively, at \$72,000 and \$58,000.³

The menhaden fishery of New England has been of but little importance since 1879, which was the last year in which the menhaden appeared north of Cape Cod in large numbers. Receiving its first start during the decade before the Civil War, the menhaden industry of New England grew steadily until 1877, at which time there were upwards of 60 menhaden oil and fertilizer factories on the New England coast, representing an investment of \$3,000,000 and turning out annually a product with a value of more than a million dollars.⁴ In 1880,

¹U. S. Census Report, *Fisheries of the United States, 1908*, p. 71.

²*Ibid.*, 34.

³*Ibid.*, 40.

⁴McFarland, *History of the New England Fisheries*, 225.

because of the diminution of the supply of fish, many of the factories were closed. In Maine the industry was completely suspended, and in the other New England States there was a great reduction in the output of oil and fertilizer. The decline of the industry has steadily continued almost ever since. In 1908 the catch of menhaden in New England was valued at \$142,000, nearly all of which was credited to Connecticut and Rhode Island.¹ The menhaden factories of Maine were not operated at all during that year

THE SHELLFISH FISHERIES.

Nothing emphasizes more forcibly the change that has taken place in the New England fisheries than the fact that at the present time the oyster outranks in value any other fishery product of the section. It is only during recent years that the oyster fishery of New England has assumed a position of importance, and while the industry there does not approach the extent of the fishery of the Chesapeake Bay district, it has made such rapid progress that the census of the fisheries taken in 1908 showed that from the standpoint of value Connecticut led all other States in the production of oysters.² The practice of transporting oysters from Virginia to the southern coast of New England, which was carried on to some extent before the Civil War, was resumed after the close of the war and continued until about 1885. The production of oysters has increased steadily ever since the industry was established. The output in Connecticut, where the yield has been greatest, increased from a value of \$386,000 in 1880 to \$1,062,000 in 1889, and in 1908 to \$2,583,000.³ The product of all New England increased from 537,000 bushels, valued at \$655,000, in 1880, to 5,332,000 bushels, valued at \$3,771,000, in 1908.⁴ The product of Rhode Island in the latter year was valued at \$969,000, and that of Massachusetts at \$218,000.² The oyster product of Maine is relatively insignificant. Of the Connecticut oysters produced in 1908 approximately two-thirds, representing more than one-half of the value, were sold as seed oysters for replenishing old beds or starting new ones.² Practically all the oyster beds of New England are privately owned.

Next to the oyster, the lobster is the most valuable of the shellfish of New England. It ranked fifth among the fishery products of the United States in 1908, and of the product of 15,279,000 pounds, valued at \$1,931,000, 96 per cent was credited to New England, 66 per cent to the State of Maine alone.⁵ For more than two decades the lobster product of New England has had an annual average value of more than \$1,250,000. The lobster fishery first assumed a position

¹U. S. Census Report, *Fisheries of the United States, 1908*, p. 63.

²*Ibid.*, 67.

³*Ibid.*, 92. This amount represents the value of oysters taken by Connecticut fishermen. A considerable portion of the product of 1908 was taken from the waters of Long Island and Rhode Island.

⁴U. S. Census Report, *Fisheries of the United States, 1908*, p. 68.

⁵*Ibid.*, 61.

of commercial importance about 1842, with the establishment of a lobster cannery in Maine. For a number of years there was no regulation of the fishery, and because of the practice of using young lobsters for canning purposes there soon came to be a great diminution of the supply. In 1879 the legislature of Maine enacted a law prohibiting the canning of lobsters except from April 1 to August 1, and four years later enacted another measure making it illegal to can lobsters less than 9 inches in length.¹ Since 1884 all the New England States have passed laws to protect the lobster fishery, and in no State can lobsters of less than 9 inches in length now be taken, and in all the States the destruction of the "berried" lobsters, as the females carrying eggs are called, is prohibited. In Maine the lobster-canning season was curtailed again in 1891, and in 1895 the minimum length of lobster that could be had for canning was fixed at 10½ inches. The last act put an end to the lobster-canning industry, but failed to check the steady diminution of the supply of lobsters. About 1885 both the United States Bureau of Fisheries and some of the State officials of New England began the artificial propagation of lobsters in an attempt to check the rapid decrease of the fishery. The early efforts in this direction were attended with but little success, but in 1905 a method of rearing the young lobsters through the early stages of larval helplessness was developed, and since then the lobster fishery has been slowly gaining. If the policy of conservation as pursued at present is continued, there is no longer any danger that this valuable fishery will become exhausted.

The clam fishery of New England has been carried on since colonial times and at present ranks sixth in value among the fisheries of that section, the product in 1908 amounting to 905,000 bushels, valued at \$732,000.² In common with the other inshore fisheries, the clam industry has developed chiefly during the last half century, having been of little commercial significance during the years before 1860. In both Maine and Massachusetts, where the important clam fisheries of New England are found, the clam is the basis of a canning industry of some importance. Since 1898 there has been a steady reduction in the quantity of clams taken each year, and investigations and experiments are now being made with a view to devising methods of restoring the clam fishery to its former position.

¹McFarland, *History of the New England Fisheries*, 233.

²U. S. Census Report, *Fisheries of the United States*, 1908, p. 52.

CHAPTER XXXIII.

THE FISHERIES OF THE ATLANTIC AND GULF COASTS.

Fish resources of the Atlantic and Gulf coasts, 180. Extent and value of the fisheries, 182. Statistics for 1908, 183-184. Statistics of Gulf fisheries in 1908, 185. The shellfish fisheries, 185. Quantity and value of oyster fishery in 1908, 186. Early methods of marketing oysters, 187. Shucking and canning of oysters, 189. Prosperity of the oyster business after 1850, 189. Oyster planting and culture, 190. The oyster industry in the South Atlantic and Gulf States, 192. The clam and crab fisheries, 192. The shad fishery, 193. Establishment of shad hatcheries after 1880, 194. Quantity and value of shad fisheries in 1908, 195. Shad fishery of the Chesapeake Bay and Delaware River, 195. Other fisheries, 196. The rise and decline of the sturgeon fishery, 196. The menhaden oil and fertilizer industry, 199. The sponge fishery, 201.

Though the fisheries of the eastern coast of the United States, exclusive of New England, are now the most extensive and valuable of all American fisheries, it is only since the middle of the nineteenth century that they have reached a position of high rank. Throughout the colonial period, while the fisheries were one of the most important factors in the economic, commercial, and political development of New England, the fishing resources of the colonies farther south were generally neglected; and during the half century following the establishment of the National Government, while dozens of New England ports employed thousands of men and hundreds of vessels in the fishing industry, the fishing interests of the coast south of the Hudson River attained only a small degree of commercial importance. The early inception of the New England fishing industries and the long-continued neglect of the fisheries in the Atlantic and Gulf States were due chiefly, as has already been explained, to the differences in geographical and climatic conditions. The rigorous climate and rocky soil of New England tended to repress agriculture and the early inhabitants were quick to seize opportunities to engage in other lines of economic endeavor, such as fishing, commerce, and manufacturing.

Until near the middle of the nineteenth century, salted and pickled fish were the most important products of the fishing industry, and New England was for a long time able to supply the demand for these in the United States. Having the advantage of an early start, superior equipment, and proximity to the region of the sea where the most popular varieties of fish suitable for salting and pickling could be found in abundance, New England maintained a complete monopoly of commercial fishing. Until the development of the railway system gave means of rapid transportation to inland points, the only important markets for fresh sea-fish were the cities on the Atlantic seaboard, and the fresh fish sold in these cities were largely supplied by the New

England fishermen. With the increase of population and the development of the steam-railway service the market for fish became larger than New England could supply, and localities along other parts of the Atlantic coast, as well as along the Pacific coast and on the Great Lakes, began to take a prominent part in the fishing industry. The possibility of preserving fish during long shipments by the use of ice, and the development of canning processes, enabled many fishery products, long available only for local consumption, to compete universally with the cured cod and mackerel, and brought about a revolutionary change in the domestic fish trade, not only leading to the extensive development of fishing resources outside of New England, but transforming the character of the fishing business within New England as well.

FISH RESOURCES OF THE ATLANTIC AND GULF COASTS.

The fishing-grounds of the eastern coast of the United States south of New England are found near the shore. From New York southward the submerged "continental shelf," which forms the important fishing-grounds from New England to Labrador, becomes narrower, the line of 100 fathoms of ocean depth approaching within a few miles of the Florida coast. Moreover, the water of the ocean in this region is much warmer than that north of Cape Cod, and cod, halibut, hake, and other varieties of ground-fish indigenous to cold water are not found here. Consequently off-shore fisheries do not possess as much relative importance as the off-shore fisheries of New England, though they are by no means entirely wanting, the temperate waters of the ocean along the Middle Atlantic States and the warmer waters south being frequented by a number of varieties of fish, such as flounders, blue-fish, squeteague, and snappers, which constitute the basis of valuable industries. But while the character of the ocean bottom and the temperature of the water prevent the existence of extensive off-shore fisheries, the configuration of the coast-line and the presence of numerous large rivers on both the Atlantic and Gulf slopes afford admirable conditions for large and valuable inshore and river fisheries.

Along the entire coast from New York to Texas is to be found an almost continuous series of sheltered bays, sounds, and lagoons, the shallow waters and sandy beaches of which form an incomparable home for many varieties of shellfish, both mollusks and crustaceans, such as oysters, clams, scallops, crabs, shrimp, and prawn. Of the 14 coast States in this region, 12 in 1898 had oysters as their most valuable fishery product, and in the other two oysters ranked a close second in value. The sheltered water of the bays and lagoons, together with the fresh or brackish-waters of the numerous large rivers, afford an extensive feeding-ground for fish, some of which are to be found throughout the year, and others of which, particularly anadromous fish such as

shad and alewives, come at regular seasons for the purpose of depositing their spawn in the upper courses of the rivers.

That the early inhabitants of the Atlantic coast regarded the wealth of fish at hand as a valuable part of their newly settled domain is shown by numerous references in documents and letters concerning the economic resources of the country. At Jamestown, during the "starving time" of 1609, fish formed an important part of the food-supply of the perishing settlers. It was reported of the new colony that "they have thirty several sorts of Fish, River and Sea, very excellent good in their kinds, plentiful and large."¹ The Dutch settlers of New York and the Swedes who came to the shores of the Delaware commented on the variety and richness of their fisheries. William Penn, in a letter to the Free Society of Traders, said of his great estate:

"Of Fish, there is the Sturgeon, Herring, Rock, Shad, Catshead, Sheepshead, Eel, Smelt, Pearch, Roach; and in Inland Rivers, Trout, some say Salmon, above the Falls. Of Shelfish, we have Oysters, Crabbs, Cockles, Concks, and Mushels; some Oysters six inches long, and one sort of Cockles as big as the Stewing Oysters, they make a rich Broth. . . . To say nothing of our reasonable Hopes of good Cod in the Bay."²

In his *Further Account of Pennsylvania*, written in 1685, Penn described several of the fish and the manner of taking them, and said:

"Sturgeon play continually in our Rivers in Summer. And though the way of curing them be not generally known, yet by a Receipt I had of one Collins . . . I did so well preserve some that I had them good there three months of the Summer, and brought some of the same so for England."³

In *A Relation of Maryland*, written in 1635, it is told that—

"The Sea, the Bayes of the Chesopeack, and Delaware, and generally all the Rivers, doe abound with fish of severall sorts; for many of them we have no English names: There are Whales, Sturgeons, very large and good, and in great abundance; Grampuses, Porpuses, Mulletts, Trouts, Soules, Place, Mackerell, Perch, Crabs, Oysters, Cockles, and Mussles; But above all these the Fish that have no English names, are the best except the Sturgeons."⁴

Robert Horne, in his *Description of the Province of Carolina*, written in 1666, said:

"Here are as brave Rivers as any in the World, stored with great abundance of Sturgeon, Salmon, Basse, Plaice, Trout, and Spanish Mackrill, with many other most pleasant sorts of Fish, both flat and round, for which the English Tongue hath no name."⁵

And in Thomas Ashe's *Carolina*,⁶ written in 1682, there is a lengthy description of the various fishing resources of the south Atlantic coast. Practically all the broadsides and pamphlets describing the opportunities for settlers in the New World, in enumerating the list of

¹*A Perfect Description of Virginia*, 4 (Peter Force, *Tracts*, II, No. 8).

²Myers (ed.), *Narrative of Early Pennsylvania, West New Jersey and Delaware*, 229.

³*Ibid.*, 265.

⁴Hall (ed.), *Narratives of Early Maryland*, 80.

⁵Salley (ed.), *Narratives of Early Carolina*, 69.

⁶*Ibid.*, 152-155.

articles which prospective colonists should take with them, mentioned a supply of fishing lines and hooks and material for building boats to be used for fishing.

But notwithstanding the extreme abundance of fish, there was, before the end of the eighteenth century, but little commercial fishing south of New England. Large quantities of fish were taken for home use by the people living near the shore, and for negroes and many of the poorer white people fish formed a staple article of food the year around. The Virginia planters regarded the rivers which washed the borders of their great estates as a valuable source of food-supply, and each plantation kept a supply of fishing equipment. Washington, in describing Mount Vernon to Arthur Young, wrote that its margin "is washed by more than ten miles of tide-water" and that the whole shore was one entire fishery.¹ In common with many other planters, Washington maintained a herring fishery as a by-industry, usually selling the surplus to Norfolk merchants, who sometimes exported small quantities to the West Indies.² In all the colonies north of Virginia a small oyster trade was developed during the Colonial period, but for the most part it consisted in the peddling of oysters through the villages and cities by negroes. A few vessels from New York engaged in deep-sea fishing, and from the towns at the eastern end of Long Island and from some settlements on the coast of New Jersey a small whale fishery was conducted, but at no place did commercial fisheries develop to the extent that they could be called an important part of the economic life of the people. The chief exports were products of the soil, and fishery products figured but slightly in either foreign or domestic trade.

EXTENT AND VALUE OF THE FISHERIES.

During the first half of the nineteenth century the fishing industries of the Middle Atlantic States grew slowly but steadily, the oyster fishery in particular attaining a position of some importance. The first attempt of the census officials to collect information concerning the fisheries of the entire country was made in 1840. The statistics collected for that year, though far from complete, showed that in several of the Atlantic States a number of fisheries were firmly established. In Maryland, 7,814 persons were employed in various fishing industries, chiefly in the oyster fishery. North Carolina and Maryland each produced more than 70,000 barrels of pickled fish, and North Carolina a small quantity of dried fish. New York, Delaware, and Virginia each contributed over 20,000 barrels of pickled fish, and New York ranked next to Massachusetts and Connecticut in the value of whale products reported.³ By 1860 the products of the fisheries of the Middle Atlantic

¹*Writings of Washington* (Sparks, ed.), XII, 310.

²*Documentary History of American Industrial Society*, I. Phillips (ed.), *Plantation and Frontier*, 1649-1863, I, 190.

³Tucker, *Progress of the United States*, 158.

States had an annual value considerably in excess of \$1,000,000, made up mostly by the oyster product of New Jersey, New York, Virginia, and Maryland. The Civil War brought about almost a complete suspension of the fisheries of all the Southern States and of the Chesapeake Bay district, but with the return of peace they began to develop on a more extensive scale than ever. All the fisheries along the Atlantic coast have continued to increase in magnitude, while those of the Gulf States, which were hardly begun before the Civil War, have grown to a point of considerable value. Table 68 gives statistics of the condition of the fisheries of the entire eastern coast of the United States in 1908.¹

TABLE 68.—Fishery industry of the Atlantic and Gulf coasts of the United States, 1908.

	New England States.	Middle Atlantic States.	South Atlantic States.	Gulf of Mexico division.
Number of persons employed.....	22,157	54,163	17,961	15,481
Capital.....	\$11,970,000	\$11,105,000	\$2,324,000	\$3,901,000
Vessels and boats, with outfit.....	8,201,000	7,280,000	1,073,000	2,805,000
Apparatus of capture....	1,675,000	1,578,000	569,000	374,000
Shore and accessory properties and cash...	2,094,000	2,248,000	682,000	722,000
Value of products.....	15,139,000	16,302,000	4,034,000	4,825,000

From the standpoint of value of product the fisheries of the Middle Atlantic States led the fisheries of the other sections, and the number of persons employed in this group of States was equal to the number employed in all the other fisheries of the Atlantic and Gulf States. The capital invested in the fisheries was only slightly less than in New England. In each State of the Middle Atlantic group the oyster is the leading product and makes up more than half the value of the fishery products of the whole group. The shad, clam, and squeteague fisheries each had a product in 1908 valued at more than \$1,000,000, and the crab and menhaden fisheries each a product of more than \$600,000 in value. Table 69 gives the value of the products of the most important fisheries of each of the Middle Atlantic States in 1908.²

It will be seen from table 69 that, as regards value, the Middle Atlantic States contributed over one-half the oyster product of the country and from one-half to two-thirds of the total product of the shad, clam, squeteague, crab, menhaden, and alewife fisheries.

Of the fisheries of the South Atlantic States those of North Carolina and Florida are the most valuable, though the oyster fishery of Georgia is rapidly giving that State a more important position. In 1908 the shad was the most valuable product of the South Atlantic fisheries, the total catch having a value of slightly less than \$1,000,000. The oyster,

¹U. S. Census Report, *Fisheries of the United States, 1908*, p. 11.

²Compiled from U. S. Census Report on *Fisheries of the United States, 1908*. The statistics for New York and Pennsylvania include only Atlantic coast fisheries of those States.

mullet, squeteague, and alewife were in order the next most valuable products. Table 70 gives the value of the leading fisheries of this section.¹

TABLE 69.—*Value of principal fisheries of Middle Atlantic States, 1908.*

State.	All fisheries.	Oyster.	Shad.	Clam.	Squeteague.
New York.....	\$4,390,000	\$2,553,000	\$27,000	\$292,000	\$451,000
New Jersey.....	3,069,000	1,369,000	229,000	336,000	342,000
Pennsylvania.....	280,000	176,000	38,000	.....	.....
Delaware.....	541,000	169,000	68,000	.....	29,000
Maryland.....	3,306,000	2,228,000	247,000	16,000	47,000
Virginia.....	4,716,000	2,348,000	486,000	380,000	139,000
Total.....	16,302,000	8,843,000	1,095,000	1,024,000	1,008,000
Total for United States..	54,031,000	15,713,000	2,113,000	1,896,000	1,776,000

State.	Crab.	Menhaden.	Bluefish.	Alewife.	Cod.	Flounder.
New York.....	\$9,000	\$22,000	\$291,000	\$7,100	\$99,000	\$141,000
New Jersey.....	34,000	43,000	99,000	12,000	130,000	25,000
Pennsylvania.....	.....	.....	.....	6,400	.....	.....
Delaware.....	13,000	152,000	.....	8,400	.....	.....
Maryland.....	319,000	30,000	.....	157,000	.....	.....
Virginia.....	326,000	429,000	14,000	171,000	.....	.....
Total.....	701,000	676,000	404,000	361,900	229,000	166,000
Total for United States..	912,000	893,000	506,000	589,000	2,914,000	588,000

TABLE 70.—*Value of principal fisheries of South Atlantic States, 1908.*

State.	All fisheries.	Shad.	Oyster.	Mullet.	Squeteague.	Alewife.
North Carolina...	\$1,776,000	\$373,000	\$236,000	\$175,000	\$206,000	\$140,000
South Carolina...	288,000	41,000	137,000	19,000	9,000	.....
Georgia.....	701,000	190,000	339,000	5,000	12,000	.....
Florida (Atlantic coast).....	1,269,000	320,000	109,000	177,000	133,000	.....
Total.....	4,034,000	924,000	821,000	376,000	360,000	140,000
Total for United States.....	54,031,000	2,113,000	15,713,000	908,000	1,776,000	589,000

On the Gulf coast practically the whole development of commercial fisheries has occurred since the Civil War, but the growth has been such that in 1908, as is shown by table 71, the fisheries of this section had a total product of greater value than the fisheries of the South Atlantic division. The warmth of the waters of the Gulf and the character of the shore-line are favoring conditions for the existence of a great abundance of animal life, and the fishing resources are consequently very large. As yet they are but slightly developed, but with the increase of population and the expansion of industry in the South they will continue to grow in importance. In 1908 the oyster was the

¹Compiled from U. S. Census Report. *Fisheries of the United States, 1908.*

leading product, representing nearly one-third of the value of all the Gulf fishery products. The red snapper, sponge, and mullet fisheries each contributed a product of over \$500,000 in value, Florida possessing the only sponge fishery and a large proportion of the other two. Each Gulf State had a small squeteague industry, and the shrimp and prawn fishery, confined almost entirely to Louisiana and Mississippi, had a product valued at about \$300,000. Table 71 shows the leading fisheries in 1908, giving the value of the products of each.¹

TABLE 71.—*Value of principal fisheries of the Gulf Coast, 1908.*

State.	All fisheries.	Oyster.	Red snapper.	Sponge.	Mullet.	Shrimp and prawn.	Squeteague.
Florida (Gulf coast).....	\$2,120,000	\$187,000	\$432,000	\$545,000	\$475,000	.....	\$63,000
Alabama.....	358,000	173,000	92,000	.....	33,000	\$1,000	10,000
Mississippi.....	459,000	296,000	.....	.....	20,000	81,000	28,000
Louisiana.....	1,448,000	763,000	.....	.....	6,000	213,000	82,000
Texas.....	446,000	168,000	79,000	.....	.....	4,000	46,000
Total.....	4,831,000	1,587,000	603,000	545,000	534,000	299,000	229,000
Total for United States.....	54,031,000	15,713,000	636,000	545,000	928,000	494,000	1,776,000

To give a complete account of the development of all the numerous fisheries of the several States along the Atlantic and Gulf coasts would require the presentation of a mass of detail, most of which would be without significance beyond indicating the mere fact of their progress in magnitude and value. The statistics in the preceding paragraphs show in the main what has been the general trend of development and indicate what are the leading fishing industries at the present time. No attempt will be made to present a detailed statement of the history of all the fisheries of these sections, but a brief account of the development of the more important ones will be given.

THE SHELLFISH FISHERIES.

The oyster fishery has been for a number of years the most valuable fishing industry of the United States. The products of this fishery in 1908, made up of 33,330,000 bushels of oysters, valued at \$15,713,000, constituted 29 per cent of the value of the product of all the fisheries of the country.² The salmon fishery, which ranked second as regards value, contributed only 6 per cent of the total value, or less than one-fourth as much as the oyster fishery. The whaling industry at the time of its greatest prosperity did not yield an annual product as great in value as that of the oyster fishery at the present time.

In 1908 an oyster fishery was reported in every State on both the Atlantic and Pacific coasts except New Hampshire. Of the total quantity of oysters produced, the States along the Atlantic Ocean

¹Compiled from U. S. Census Report, *Fisheries of the United States, 1908*.

²U. S. Census Report, *Fisheries of the United States, 1908*, p. 24.

south of New England contributed 64 per cent and the Gulf States 17 per cent. Of the value of the entire output these sections produced a somewhat smaller proportion, being credited respectively with 62 and 9 per cent.¹ The greatest productive areas were those of Chesapeake Bay and Long Island Sound. Virginia and Maryland together contributed one-third of the total output, while one-fifth came from New York, Connecticut, and Rhode Island. Louisiana ranked fourth in the quantity of oysters taken, though as regards value that State held seventh place. New Jersey, ranking fifth both as to quantity and value, was one of the important oyster States, and South Carolina, Georgia, Mississippi, and Florida each produced more than 1,000,000 bushels.²

¹U. S. Census Reports, *Fisheries of the United States, 1908*, p. 67.

²The following statistics, from the U. S. Census Report, *Fisheries of the United States, 1908*, p. 67, give the record of the oyster fishery of the United States in 1908:

TABLE 72.—Quantity and value by States of oyster fishery, 1908.

State.	Quantity.	Percentage of total quantity.	Value.	Percentage of total value.
	<i>bushels.</i>			
Maryland	6,232,000	19	\$2,228,000	14
Virginia	5,075,000	15	2,348,000	15
Connecticut	3,948,000	12	2,583,000	16
Louisiana	3,650,000	11	763,000	5
New Jersey	2,586,000	8	1,369,000	9
New York	2,463,000	7	2,553,000	16
South Carolina	1,563,000	5	137,000	1
Georgia	1,459,000	4	339,000	2
Rhode Island	1,229,000	4	969,000	6
Mississippi	1,068,000	3	295,000	2
Florida	1,067,000	3	296,000	2
North Carolina	813,000	2	236,000	2
Alabama	590,000	2	173,000	1
Texas	497,000	1	168,000	1
Delaware	348,000	1	169,000	1
Pennsylvania	277,000	1	176,000	1
Washington	204,000	1	352,000	2
Massachusetts	155,000	..	218,000	1
California	104,000	..	337,000	2
Oregon	1,300	..	4,200	..
Maine	200	..	200	..
Total	33,330,000	100	15,713,000	100

Statistics taken for different sections since 1908 (*Report of U. S. Commissioner of Fisheries, 1913*, p. 41) give the following record of the oyster fishery for the years indicated:

TABLE 73.—Quantity and value of oyster fishery by sections of country.

Region.	Quantity.	Value.
	<i>bushels.</i>	
New England States (1910)	5,942,021	\$3,597,034
Middle Atlantic States (1911-12)	18,906,076	9,263,556
South Atlantic States (1910)	1,700,998	364,184
Gulf States (1911)	6,226,141	1,476,966
Pacific Coast States (1912)	213,579	676,243
Total	32,988,815	15,377,983

When the white men came to establish settlements in the New World they found oysters in abundance along the entire Atlantic coast from New England southward, except in a few places, such as the shores of the eastern half of Long Island and the open portions of the New Jersey coast and the South Atlantic region, where there was no protection from the violence of the ocean storms. The quantity in and about New York Bay, Chesapeake Bay, and Delaware Bay was especially great. Immense beds of oysters were found all along the Brooklyn shore of the East River, all about Manhattan Island, up the Hudson River as far as Ossining, and on the New Jersey shore opposite Keyport on Raritan Bay, in the mouths of the Raritan, Hackensack, and Newark Rivers, and all around Staten Island. Even the Harlem River was noted for its oyster beds.¹ From most of these localities the oysters have long since disappeared, but their abundance in the bays and inlets on both shores of the western half of Long Island still makes the New York district one of the important oyster centers. In the Delaware, oysters were at one time found as far up as Philadelphia, and in the Chesapeake oyster-beds were found, scattered in apparently inexhaustible profusion, on nearly every part of the bay, as well as in the lower courses of the numerous rivers which empty into the bay. Oysters were nearly everywhere regarded by the early settlers as one of the valuable portions of the natural food-supply of their new country. That the oysters of New York Bay and Delaware Bay were highly prized by the colonists is indicated by the many favorable references to them in the early accounts of the colonies. The Maryland settlers on the Chesapeake do not seem to have held the oysters in very great esteem,² but the colonists of Virginia regarded them as one of their best and cheapest foods. In the northern localities, however, where a large number of people lived near the coast and where there was a tendency toward the congregation of population in towns and cities, the regular oyster industry had its origin.

Long before the end of the seventeenth century Indians were bringing oysters regularly to supply the New Amsterdam colonists, and Pearl Street, New York, is said to have received its name because it was paved with oyster shells during the period of Dutch occupancy.³ By the end of the eighteenth century the fame of the New York oysters had grown so that fishermen from other colonies, especially from New England, came frequently to the New York waters to secure oysters, and it became necessary for the colonial authorities of New York and New Jersey to take steps to prevent the undue depletion and possible exhaustion of the oyster supply.⁴ The oyster fishery was reserved to resident fishermen in both colonies, and a closed season was established from May to September. Despite the necessity for the enactment of

¹Goode, *The Fisheries and Fishery Industries of the United States*, sec. v, vol. II, 511.

²*Bulletin of United States Fish Commission*, 1892, p. 208.

³Ingersoll, *The Oyster Industry* (U. S. Census 1880), 121.

⁴*Ibid.*, 111.

such restrictive measures, the colonial oyster business was very small as compared to that of the present time. In the middle of the eighteenth century the best oysters sold for only 2 shillings a bushel; negroes were the principal vendors, and as late as 1815 so small were the profits to be derived from the oyster fishery that it was considered a mark of degradation to rake oysters for a living. Most of the oysters taken were consumed in the towns and villages near the source of supply; New York was the only important large market, and even there the trade remained so small that in 1825 there was only one wholesale oyster dealer in the city.¹ There was a small but growing inland trade, however. Oyster wagons made regular trips through the towns and villages near the coast, and sloops loaded with oysters were sent up the Hudson River to Albany, whence the cargoes were distributed by wagons. The shallow-water oyster-beds known to the early colonists were exhausted and abandoned, but new beds were discovered, and considerable quantities, as stated below, were brought north from the Virginia beds to supply the needs of the trade and to start new oyster beds in favorable localities near New York.

In the districts south of New York the oyster fishery developed still more slowly. The oystermen of southern New Jersey had to seek their principal market in Philadelphia, and the trade was greatly hampered because of the hard journey across the State by wagon or the long voyage by water. In the Chesapeake Bay district there were no available markets of importance and previous to 1820 there was not a single wholesale oyster establishment in the entire Chesapeake district. Considerable quantities of oysters were taken for local consumption, and many were shipped northward directly to the markets of New York and Philadelphia or to points along the New England and New Jersey coasts, where they were planted to attain a larger size or to establish new beds.

About 1825 the oyster industry began to expand rapidly. The wagon trade in the New York district had been growing steadily, and the cheaper and faster means of transportation afforded by the New York canal system encouraged the increase of business. Furthermore, about this time an oyster dealer of New Haven, Connecticut, began the practice of opening the oysters intended for shipment and sending them to consumers at a distance in small wooden kegs or other water-tight receptacles.² It was found that the oysters would remain in good condition for several days and even weeks during the cold season. Because of the convenience and cheapness of this method of shipment it was immediately adopted in other localities. The oyster fishery was greatly stimulated and within a few years the oyster trade extended all over the country. The growth of trade was reflected in a decrease of the supply of oysters in the vicinity of New York, and the rising prices encouraged the practice of bringing larger and larger quantities

¹Ingersoll, *The Oyster Industry* (U. S. Census, 1880), 123.

²Goode, *The Fisheries and Fishery Industries of the United States*, sec. v, vol. II, 559.

from Chesapeake Bay to shucking houses in the New York district. The cost of shipment of the Chesapeake oysters and the difficulties incident to the business suggested the idea that the rapidly expanding trade could be carried on more conveniently as well as more profitably by transferring the shucking-houses to the oyster-grounds of Maryland and Virginia, and in 1836 a New Haven oyster merchant established a shucking-house at Baltimore.¹ The experiment was highly successful, others soon engaged in the industry, and within a few years the Baltimore oyster trade began to assume large proportions. Lines of oyster wagons were run out to all the neighboring cities, and one wagon line extended as far west as Pittsburgh.¹ The growth of the railway system was an immense help to the oyster business, which soon held an important position among the fishing industries.

The shucking of oysters and shipment in a raw state was soon followed by a second innovation, the steaming and canning of oysters. Although the process of preserving cooked oysters had probably been known in colonial times, it was never of commercial value until about 1848, when a Baltimore dealer began to steam oysters and ship them packed in hermetically sealed tin cans.² Like the earlier venture at oyster packing, the canning business at once proved successful, six Baltimore establishments being engaged in the industry in 1850, turning out 400,000 to 500,000 cans of oysters a year.³ With the growth of the shucking and canning enterprises in Baltimore and at other points in Maryland and Virginia, the oyster fishery of Chesapeake Bay developed very rapidly and soon rivaled in importance the fisheries of the districts farther north.

By 1850 the oyster business was in a prosperous and flourishing condition in practically all the areas which have since risen to great importance. Reliable statistics of the oyster industry before 1880 are not available, and it is impossible to state the extent of the fishery before that year or to present satisfactory figures for the comparison of the various districts. The fishery of the Chesapeake region was almost entirely suspended during the war, but with the return of peace it was resumed on a greater scale than ever, and within a short time was far more important than the fisheries of New York and New Jersey. About 1870 the oyster product of Maryland alone began to exceed 10,000,000 bushels a year, with a value of \$4,000,000 and upwards.⁴

When the first complete survey of the oyster industry was made, in 1880, Maryland, Virginia, New Jersey, New York, and Delaware ranked in the order named as regards the quantity of oysters obtained. Of a total of 22,195,000 bushels of oysters taken in the United States, 20,700,000 bushels came from the Middle Atlantic States, Maryland producing 10,600,000 and Virginia 6,800,000 bushels.⁵ The oyster

¹Ingersoll, *The Oyster Industry*, (U. S. Census, 1880), 167.

²Stevenson, *The Oyster Industry of Maryland* (Bul. U. S. Fish Commission, 1892), 267.

³Ingersoll, *Ibid.*, 167 (note).

⁴Stevenson, *Ibid.*, 212.

⁵Ingersoll, *Ibid.*, 251.

fishery was at that time, and has been ever since, the most valuable fishery of the United States. Its development had made the Middle Atlantic States a close rival of the New England States in the importance of fisheries, and the maintenance and continued growth of the oyster business after 1880 enabled the Middle Atlantic States eventually to assume first place, usurping the position which New England held for more than two centuries.

Since 1880 the oyster fishery has fluctuated from year to year, according to the favorable or unfavorable character of the season and the conditions of the oyster-beds. On the whole, the quantity of oysters marketed has gradually increased, and with a rise of prices the value of the product has increased at a greater rate than the quantity. The Chesapeake Bay fishery has continued to hold first place, the combined annual output of Virginia and Maryland exceeding that of any other single region. From 1875 to 1890 Maryland possessed the greatest oyster industry in the world, and Baltimore was the center of the largest oyster trade ever developed at any one place. During the following decade Maryland gradually declined in relative importance, and since 1900 the quantity of oysters taken from Virginia waters has usually equaled or exceeded the Maryland output, and the oyster product both of New York and of Virginia has exceeded the value of the product of Maryland. In 1912 the Virginia product was greater than that of Maryland by 750,000 bushels.¹

The oyster-canning industry reached its maximum development about 1885, and since then, because of the decrease of the supply of Maryland oysters and because of the growing demand for the fresh product, the canning business of Baltimore and surrounding points has gradually declined. Maryland no longer holds first place in this industry, being surpassed in 1908 by Mississippi, Louisiana, and South Carolina.²

The most notable features of the oyster industry in recent years have been the rapid advance of oyster planting or culture and the decrease in the quantity of oysters taken from public beds. Even in colonial days the excessive fishing of oyster-beds made necessary the enactment of laws intended to check the undue depletion of the natural supply of oysters. As the oyster fishery developed in importance during the nineteenth century, it became apparent that restrictive legislation would not prevent the ultimate destruction of the public beds, and that unless other steps were taken the supply of oysters would be exhausted. The perpetuation of the oyster industry was made possible only by the introduction of oyster-culture on a large scale. Oyster-culture is said to have originated in the thrifty custom of employing leisure hours to bring in supplies of oysters from outer beds and deposit them near shore, where they would be easily accessible when wanted. The practice began on Cape Cod before 1800, as a regular part of the preparation

¹*Report of U. S. Commissioner of Fisheries, 1913, p. 41.*

²*U. S. Census Report, Fisheries of the United States, 1908, p. 285.*

of oysters for market. Oysters thus moved generally improved in size and quality after lying a few months on new ground, because in moving them they were broken apart from the original clusters and thus secured more room. When native resources of oysters became somewhat depleted, it was but a step farther to send vessels to purchase seed oysters from other localities. With the gradual diminution of the native oyster-beds of New York and New Jersey the practice of planting oysters from the Chesapeake region steadily increased, and it soon became a regularly established part of the oyster industry. As private oyster-beds grew in number and area the sale of seed oysters became an important part of the oyster trade, and a large portion of the annual product now consists of seed oysters.

Table 74 indicates how the oyster product of 1908 was utilized.

TABLE 74.—Quantity and value of market and seed oysters, 1908.¹

Kinds and area.	Quantity.	Percentage of distribution.	Value.	Percentage of distribution.
Market oysters:	<i>bushels.</i>			
From public areas . . .	14,806,000	44	\$4,416,000	28
From private areas . . .	10,665,000	32	8,305,000	53
Total	25,471,000	76	12,721,000	81
Seed oysters:				
From public areas . . .	3,851,000	12	1,035,000	7
From private areas . . .	4,008,000	12	1,957,000	12
Total	7,859,000	24	2,992,000	19
Grand total	33,330,000	100	15,713,000	100

¹Census report, *Fisheries of the United States, 1908*, p. 67.

Since oyster-planting is carried on almost altogether as a private venture, it can be successful only in those States where private individuals are able to secure a legal title to the oyster-beds which they maintain. In nearly all the States having oyster fisheries it has been made possible for oyster-planters either to lease or to purchase outright from the State a limited area of sea-bottom suitable for oyster-culture. Maryland is the only important oyster State on the Atlantic coast which has failed to protect adequately the operations of the oyster-planters, and consequently oyster-culture has made but little headway there, a condition that is in a large measure responsible for the diminution during recent years of the output of Maryland oysters. In New York, New Jersey, Georgia, Rhode Island, Connecticut, Massachusetts, and the Pacific Coast States the majority of oysters are now taken from private areas, while in Maryland, North Carolina, South Carolina, Florida, and the Gulf States the oysters are taken mostly from public beds. The total product of market oysters from public beds in 1908 was more than a third larger than that from private beds,

but the value of the latter was almost double that of the former. Of seed oysters the quantity taken from private beds was the larger and more valuable.

In the South Atlantic and Gulf States the oyster industry commenced much later than in the New York, New Jersey, and the Chesapeake districts, but its rapid development in recent years, especially in the Gulf district, indicates that if progress continues it will, before many years, rival the longer established industries of the Northern States. In 1880 the oyster product of the South Atlantic States amounted to only 310,000 bushels, and that of the Gulf States to only 579,000 bushels.¹ In 1908 the product of the two divisions was, respectively, 4,364,000 and 6,343,000 bushels. Louisiana, with 3,650,000 bushels in 1908, ranked fourth among the States as regards the amount of output. South Carolina, Georgia, Mississippi, and Florida each contributed more than 1,000,000 bushels, and Alabama and Texas about 500,000 bushels each.¹ Oyster-canning was started in several of the Southern States about 1880, and the industry has been steadily maintained. In 1908 Louisiana, Mississippi, and South Carolina were the three leading States as regards the quantity of oysters canned, and Georgia, Florida, and North Carolina each had a canning industry of some value.² As yet the larger part of the oysters on the Gulf coast is taken from public areas, but oyster-culture has been encouraged and protected, and is steadily increasing. In 1911, out of a total product of 6,226,141 bushels of oysters taken in the Gulf States, 2,080,005 bushels came from private grounds. In the South Atlantic States in 1910 only 456,194 bushels were taken from private grounds, as against 1,244,804 bushels from public areas.³

Of other shellfish taken on the Atlantic and Gulf coasts the most important are the clams and crabs, found most abundantly in the Middle Atlantic States, and shrimp and prawn, which come chiefly from Louisiana and Mississippi.

The clam industry in 1908 ranked sixth in value among the fisheries of the United States, the total product amounting in value to \$1,917,000. Of this amount the Middle Atlantic States contributed \$1,024,000 and New England most of the remainder.⁴ Both hard and soft clams are taken in the Middle Atlantic States, though the quantity of soft clams is but small, this species not appearing south of New Jersey. The hard clam or quahog fishery extends all along the coast from Maine to Florida. The leading State in 1908, with respect to value of product, was Virginia, with New York and New Jersey ranking in order. As early as 1855 extensive quahog fisheries were carried on along the shore of New Jersey and Long Island, and they have

¹U. S. Census Report, *Fisheries of the United States, 1908*, p. 68.

²*Ibid.*, 285.

³Report of U. S. Commissioner of Fisheries, 1913, p. 41.

⁴U. S. Census Report, *Fisheries of the United States, 1908*, p. 52.

continued to hold an important place among the fisheries of these localities, though the decreased production in recent years indicates that the supply of clams is gradually diminishing. Prior to 1890, the Virginia quahog fishery was relatively unimportant, but it has since attained considerable value. Since 1895 there has been some progress made in the cultivation of quahogs and a portion of the product is now taken from private grounds. The growing scarcity of the quahogs on public grounds and the increasing demand for them will probably result in extensive developments in their cultivation.

The total value of the hard and soft crabs taken in the United States in 1908 amounted to \$912,000.¹ The chief center of the crab fishery was the Chesapeake Bay district, Maryland and Virginia dividing almost equally between them over two-thirds of the total product. The crab industry was but slightly developed before 1875. In 1880 the New Jersey crab product, valued at \$163,000, amounted to one-half of the total.¹ By 1890 the Maryland industry had outstripped that of all other localities. In both Maryland and Virginia the hard crab is the basis of an important canning industry; the soft crabs are shipped, packed in ice and seaweed, to the large cities along the Atlantic coast. Crisfield (Maryland), at one time an important center of the oyster trade, is the most important crab-shipping point in the United States, receiving most of the catch from Maryland and a large part of the Virginia product.

Most of the shrimp and prawn come from the warm waters of the Southern States. The most important shrimp fishery is in Louisiana, the product of that State in 1908 amounting in value to \$213,000.² Practically the entire catch of prawn comes from the Atlantic coast of Florida. The shrimp and prawn fishery has been in existence for more than three-quarters of a century, but its period of greatest development, especially in the Gulf region, has been since 1885. The largest part of the catch is consumed fresh in southern cities, but a portion is canned and a small amount dried.

THE SHAD FISHERY.

The fishery for shad in the rivers of the Atlantic coast is one of the oldest and most valuable of the fishing industries of the United States. During colonial times shad ascended practically all the streams of the eastern coast from Florida to the St. Lawrence, and the people living along the rivers gladly availed themselves of the opportunity to add to their food-supply from the annual run of fish, though, like many other important fisheries, the shad fishery for a long time failed to acquire a commercial standing. It is uncertain just when the first commercial shad fisheries were prosecuted, but as early as 1736 shad from the Connecticut River were advertised for sale in Boston.³

¹U. S. Census Report, *Fisheries of the United States*, 1908, p. 55.

²*Ibid.*, 72.

³Goode, *Fisheries and Fishery Industries of the United States*, sec. v, I, 660.

During the eighteenth century shad were caught all along the river courses many miles from the coast, the run of fish being blocked by natural obstructions in but few streams. Falls existed in practically all the rivers, but the only ones known to have been insurmountable for shad were Weldon Falls on the Roanoke, 249 miles from the mouth; Great Falls on the Potomac, a few miles above Washington; and Bellows Falls on the Connecticut, 204 miles from the ocean. While no shad fisheries were ever prosecuted above these falls, in other streams the shad-run extended far upstream—in the Susquehanna to Binghamton (New York), 513 miles by river, and in the Peedee, 451 miles to Wilkesboro. At present the longest run is in the St. John's River, Florida, where the run extends to the sources, some 375 miles above the mouth of the river.

In very few streams north of the St. John's River is it now possible for shad to ascend to the upper courses. Nearly all the important rivers have been rendered impassable by the erection of dams, and in dozens of streams the old spawning-grounds of the shad have been destroyed as a result of the pollution of the water by sewage and refuse from manufacturing establishments. An even more important factor in reducing the range of the shad has been the organization of extensive fisheries near the coast. Previous to the early part of the nineteenth century, while the consumption of shad was largely local, most of the fish taken were caught in the middle and upper sections of the rivers, but as the market grew and the profits to be derived from shipping the shad to distant points increased, large commercial fisheries grew up near the mouths of the streams, where the chances for large catches were greater and where better transportation facilities were available. Since 1895 the most important shad fisheries have been in the lower courses of the rivers, and by far the largest proportion of the annual catch is now taken from the salt water of the bays and estuaries near the coast.

The steady increase of the shad fishery during the nineteenth century and the gradual concentration of the fishing operations near the mouths of the rivers (where the fish could be intercepted and taken before having a chance to reach a spawning-ground) eventually so reduced the quantity of shad that it became apparent that the total extinction of the fishery would quickly occur, if natural reproduction alone were depended on to maintain the supply. As early as 1867 steps were taken to replenish and maintain the shad fishery by means of artificial propagation. Experiments in shad hatching were first made in Massachusetts, and their successful outcome induced the authorities of Rhode Island, Connecticut, and New York to begin the practice. The fish hatcheries of the Federal Government have engaged extensively in the propagation of this valuable species. Hatching operations are now carried on along almost all large streams, the eggs being

secured from the fish caught for market. Previous to 1880 artificial propagation had but little effect. In that year the total catch of shad on the Atlantic coast amounted to only 18,000,000 pounds, a smaller quantity than had been taken for several years. Thereafter, however, the fishery began to show the effects of national and State activity in fish-hatching, and for a number of years the annual yield steadily increased, the catch of 1890 amounting to over 50,000,000 pounds, but during recent years another decline has set in. The adverse conditions which caused the decline prior to 1880 have continued, until natural reproduction has ceased to be of great importance, while artificial propagation has been seriously hampered by the inability to secure a sufficient quantity of eggs for many of the State and Federal hatcheries, due to the growing demand for and consumption of shad roe.

TABLE 75.—Quantity and value of the shad fisheries in 1908.¹

State.	Quantity.	Percentage of distribution.	Value.	Percentage of distribution.
	<i>pounds.</i>			
Virginia.....	7,314,000	26	\$486,000	23
North Carolina.....	3,942,000	14	373,000	18
Florida.....	2,836,000	10	320,000	15
Maryland.....	3,937,000	14	247,000	12
New Jersey.....	3,004,000	11	229,000	11
Georgia.....	1,333,000	5	190,000	9
Delaware.....	870,000	3	68,000	3
Maine.....	770,000	3	42,000	2
South Carolina.....	464,000	2	41,000	2
Pennsylvania.....	593,000	2	38,000	2
New York.....	360,000	1	27,000	1
Connecticut.....	122,000	..	18,000	1
California.....	1,169,000	4	12,000	1
Massachusetts.....	389,000	1	12,000	1
Oregon.....	431,000	2	8,000	..
Washington.....	100,000	..	1,900	..
Rhode Island.....	4,500	..	400	..
United States..	27,641,000	100	2,113,000	100

¹From U. S. Census Report, *Fisheries of the United States, 1908*, p. 71.

Notwithstanding the decline following 1896, the shad in 1908 ranked fourth in value among the fishery products of the United States, and second among the products of the Atlantic coast fisheries, excluding those of New England. The total catch, amounting to 27,641,000 pounds, was valued at \$2,113,000. Of this quantity 58 per cent was taken in the Middle Atlantic States, 40 per cent from the Chesapeake Bay district, and 16 per cent from the Delaware Bay region. The South Atlantic States contributed 31 per cent of the total catch.

The shad fishery of the Chesapeake Bay district is the most extensive. Formerly the shad were taken in the large rivers entering the bay, the Susquehanna, the Potomac, and the James. The Potomac

and the James River fisheries were of importance and value in colonial days, pickled shad not only constituting an important part of the food-supply of the plantations along the banks of the streams, but also forming a small factor in the domestic and foreign trade of Virginia. The Susquehanna fishery, extending through Pennsylvania and into New York, was famous throughout the country, and people living many miles from the river came every spring to secure a supply of shad, either by catching them or by trading the products of their farms to the fishermen who lived along the river. At present the multiplicity of fishing operations near the mouths of these streams and in the bay itself has reduced the fisheries in the fresh waters of the rivers to insignificance. Under present conditions the shad fishery of this district is surely approaching extermination. The Commissioner of Fisheries says in his report for 1913 (page 65):

"Fish entering Chesapeake Bay have to run through such a maze of nets that the wonder is that any are able to reach the spawning-grounds to deposit their eggs. The mouth of every important shad and herring stream in the Chesapeake Basin is literally clogged with nets. . . ."

The shad fishery of the Delaware River district was for many years the most famous on the coast, and the catch in the river itself is larger now than that of any other river, but it is gradually diminishing. The catch of 1910 was only one-third as large as that of 1896, but its value was much greater because of the increase in the price of the fish.¹ In the early days of the nineteenth century the Hudson River shad fishery was one of the largest river fisheries of the country, but overfishing, pollution, and the erection of dams have reduced it to a low rank. The shad fishery of North Carolina, which for several decades has been the most valuable fishery of that State, is one of the oldest fisheries of the South Atlantic district. In 1902 North Carolina ranked first among the States in the quantity of shad taken, but by 1908 Virginia had taken the lead. In recent years the North Carolina fishery has improved, the catch in 1910 (which was only slightly less than that of Virginia) being larger than any other catch since 1902.² The St. John's River in Florida, in which the shad fishery has been developed since the Civil War, is now one of the leading shad streams of the country. In both South Carolina and Georgia the shad is among the most valuable fishery products.

OTHER FISHERIES.

Two other anadromous fish of the Atlantic coast are the alewife and the sturgeon. The sturgeon fishery of the United States has had a brief and tragic history. At one time the sturgeon was found in great abundance along the entire Atlantic coast from New England to Georgia and was also plentiful on the Pacific coast and in the Great Lakes and

¹*Report of U. S. Commissioner of Fisheries, 1911, p. 36.*

²*Ibid., 37.*

other inland waters. Like many other fishery products which later came to have large commercial value, the sturgeon were once looked upon in many localities as utterly worthless, and often, when they became entangled in fishermen's nets, they were wantonly killed and thrown back into the water. Few commercial sturgeon fisheries were established either along the Atlantic coast or elsewhere in the United States before 1870, and even in the fisheries existing at that time the sturgeon roe, which is now of great value, was often discarded as worthless. Processes of preparing the roe for caviar were soon perfected, however, and by 1880 the sturgeon fishery was well developed. The great demand for caviar in Europe stimulated the fishery and the sturgeon soon rose from a position of worthlessness to one of extremely high value. Caviar mounted in price from about \$10 a keg in 1885 to \$40 a keg in 1894.¹ This rapid increase in price gave the sturgeon fishery prominence, but reckless fishing soon brought about a rapid decline. The fishery reached the climax of its prosperity about 1890, when the annual catch was from 12,000,000 to 15,000,000 pounds a year. After that year it gradually decreased until the annual product is now less than 1,000,000 pounds a year. With the decrease in the supply the price has risen to an extraordinary figure, a mature female sturgeon easily bringing \$150 at the present time, and very few fish selling for less than \$30 each.² Along the Atlantic coast the sturgeon catch fell from 6,000,000 pounds in 1890 to 649,000 pounds in 1908.³ In some rivers which once supported a valuable fishery the sturgeon is entirely exterminated, and in all sections the catch has steadily diminished. Because of the peculiarity of the spawning habits of the sturgeon attempts at artificial propagation have entirely failed, and the fact that the roe is the most valuable part of the fish has impeded the efforts to provide for the perpetuation of the fishery through natural propagation. Under present conditions the sturgeon fishery as a commercial enterprise will soon disappear, and the fish itself will probably be practically extinct within a few years.⁴

The alewife, also called "herring" in many localities, has long been one of the most abundant of the food fishes taken along the Atlantic coast. It is caught in all the Atlantic States north of the Neuse River, but by far the largest part of the catch is taken in Virginia, Maryland, and North Carolina. Unlike the shad, the alewife seems so far to be unaffected by the erection of dams and the contamination of rivers, and with but little aid through artificial propagation, the alewife fishery has grown steadily for a number of years. The quantity taken in 1908, amounting to 89,978,000 pounds, was larger than the catch recorded in any previous year.⁵ The early settlers found the alewife a

¹Report of U. S. Commissioner of Fish and Fisheries, 1899, p. 379.

²Report of U. S. Commissioner of Fisheries, 1913, p. 67.

³U. S. Census Report, Fisheries of the United States, 1908, p. 76.

⁴Tower, "The Passing of the Sturgeon" in *Popular Science Monthly*, Oct. 1908, pp. 361-371.

⁵U. S. Census Report, Fisheries of the United States, 1908, p. 47.

ready source of food-supply, and they also used it often to fertilize their cornfields. As a commercial enterprise, the alewife fishery was of little importance before 1850. Since 1880 the annual value of the alewives taken has been about \$500,000. Of the alewife product of 1908 about three-fourths was sold fresh and the remainder cured by salting or smoking.

Of the food-fish taken from the ocean along the Atlantic and Gulf coasts the most important are the squeteague, mullet, snapper, bluefish, Spanish mackerel, and flounder. All of these species are found along the entire coast from New York to Texas, though not in uniform abundance. The squeteague and bluefish are most plentiful along the New Jersey coast and the snappers and mullet along the South Atlantic and Gulf coasts. The flounders are found in greatest abundance along New England, though a considerable quantity is caught south of Long Island. Almost the entire catch of Spanish mackerel now comes from Florida, though two score of years ago the Chesapeake Bay region led in the production of this species. The taking of practically all these fish for market began only a few years before the Civil War. The production of each species has in general advanced constantly, though the quantity taken fluctuates from year to year according to the character of the season.

The squeteague product in 1908, which was the largest recorded to that time, amounted to 49,869,000 pounds, valued at \$1,776,000.¹ About half of the entire quantity was taken by the fishermen of New York and New Jersey from the fishing-grounds along the New Jersey shore and in Delaware Bay. North Carolina, Florida, and Virginia each contributed about 4,500,000 pounds, and from every other State on the Atlantic and Gulf coasts, except Maine and New Hampshire, a squeteague product of more or less value was reported. The catch of bluefish in 1908, amounting to 7,647,000 pounds, valued at \$506,000,² was the smallest on record both as regards quantity and value. Two-thirds of the catch was contributed by New York and New Jersey and a little more than one-fourth by North Carolina and Florida. The largest bluefish catch ever recorded was that of 1897-98, which amounted to 22,461,000 pounds.

The leading mullet-producing State in 1908 was Florida, which was credited with 73 per cent of the total catch of 33,703,000 pounds, the value of which was \$908,000. The quantity of mullet taken was somewhat less than the catch of 1904, though it was of greater value.³ Over nine-tenths of the snappers caught in 1908 consisted of the red-snapper product of Florida, Alabama, and Texas. The chief fishing-grounds for this species is along the west coast of Florida, and that State was credited with more than one-half of the total snapper product, which was 13,854,000 pounds.¹ Florida also led in the production of Spanish

¹U. S. Census Report, *Fisheries of the United States, 1908*, p. 74. ²*Ibid.*, 48. ³*Ibid.*, 64.

mackerel, having approximately three-fourths of the 3,806,000 pounds taken in the United States. New York was the only State south of New England possessing a valuable flounder fishery. Of the total product of 23,346,000 pounds, New York was credited with one-fifth.¹

Two other fisheries of the Atlantic and Gulf coasts of sufficient importance to deserve notice are the menhaden fishery and the Florida sponge fishery. The menhaden fishery is one of the most interesting of all American fisheries. The menhaden, though possessing small value as a food-fish, has furnished the basis of a great industry employing thousands of men at sea and ashore, and it has for a number of years ranked first among the fishery products of the United States from the standpoint of quantity taken. It is by far the most abundant and prolific fish found along the Atlantic coast. It is a migratory species, appearing each year, with the advent of warm weather, along the coast from Maine to Texas, its favorite grounds being from Cape Cod to Cape Henry. The menhaden follow the shallow shore-waters closely, moving into the bays and brackish waters of the rivers. Most of the annual catch is taken within 2 miles of the shore.

Several attempts have been made to bring about the extensive use of menhaden as food in one form or another, but they have met with little success, and the usefulness of the species has been, for the most part, limited to their utilization as bait, as fertilizer, and as a source of oil. Beginning about 1835, and for a number of years thereafter, "slivered menhaden" was the chief bait used by the mackerel fishermen, and it was also used extensively by the halibut and cod fleets. When the hook and line were superseded by the purse-seine in the mackerel fishery, the demand for menhaden as bait was greatly reduced, and though it still forms the principal source of bait for the line fisheries of New England and the Middle Atlantic States, its chief use for several decades has been in the oil and fertilizer factories.

The menhaden oil and fertilizer industry originated in New England during the first half of the nineteenth century. A brief description of the industry has already been given. Small oil industries were established at the eastern extremity of Long Island soon after the process of manufacture was discovered, and in 1850 a large factory, with a capacity for 2,000,000 or 3,000,000 fish annually, was put up at Shelter Island, New York.² During the sixties several oil and fertilizer factories were put up south of New York, a mill being erected on the Delaware Bay in 1861, one on the Chesapeake in 1866, and another in New Jersey in 1868.³ The business proved to be very profitable, and as the menhaden were abundant and easily captured in large quantities the fishery quickly assumed large proportions. Improvements in

¹U. S. Census Report, *Fisheries of the United States*, 1908, p. 56.

²*Report of U. S. Commissioner of Fish and Fisheries*, 1902, p. 256.

³Goode, *Fisheries and Fishery Industries of the United States*, sec. ii, 398, 463; sec. v, vol. I, p. 369.

the process of manufacture quickened the industry and larger factories, capable of using 3,000 to 5,000 barrels of fish a day, were erected at several points along the coast between New York and North Carolina. For a number of years many small "kettle factories" were successfully operated, but they were at a disadvantage as compared with the large mills with their cheaper methods of large-scale production, and most of the small plants gradually dropped out of existence toward the close of the century.

During the twenty years following 1870 the menhaden fishery expanded most rapidly and reached the climax of its development. In 1880 the most important center of the menhaden industry was in the region known as the "Promised Land," near the eastern end of Long Island, where several large factories were operated.¹ The product of the Long Island mills in that year, valued at \$1,114,158, represented over half of the total value of the menhaden product.² Besides the Long Island industry, the only other important menhaden industries in 1880, outside of New England, were in Virginia and New Jersey. During the ten years following 1880, the menhaden industry was extremely prosperous, reaching the point of greatest importance in 1884, when the products rose to a value of \$2,800,000.³ Both the oil and the scrap sold at high prices and the factory owners realized large profits. Since 1884 the competition of other oils and fertilizers has cut down the profits of the menhaden industry, and though it still stands as one of the valuable industries based on the fisheries, it is neither so prosperous nor so profitable as during the decade following 1880. The industry was gradually shifted, and at present centers around the Virginia coast, where the best menhaden fisheries are to be found. In 1908 the total quantity of menhaden taken was 394,776,000 pounds, valued at \$893,000.⁴ The value of the oil and fertilizer manufactured from menhaden was probably about \$2,000,000. Virginia was credited with almost one-half of the total catch of menhaden, and Delaware and North Carolina with 15 per cent each.

Some years ago there was a concerted effort made to restrict the operations of the menhaden fishermen on the ground that large quantities of food-fish were taken in the seines with the menhaden and subsequently manufactured into oil and fertilizer. In 1894 the United States Fish Commission made an exhaustive investigation of the matter and found that only about 0.33 per cent of the catch of fish in the menhaden seine was food-fish, and of this quantity only a very small proportion consisted of choice and popular species. In fact, it was demonstrated that not enough desirable food-fish were taken to supply the crews of the menhaden vessels. The results of the investigation

¹Goode, *Fisheries and Fishery Industries of the United States*, sec. ii, 351, 353, 369.

²*Ibid.*, sec. v, vol. I, 361.

³Report of U. S. Commissioner of Fish and Fisheries, 1902, p. 257.

⁴U. S. Census Report, *Fisheries of the United States*, 1908, p. 63.

effectually put an end to all complaints that the menhaden industry was a source of danger to other fisheries.¹

The only sponge fishery of the United States is carried on from the west coast of Florida, Key West and Tarpon Springs being the most important centers. The sponge fishery dates from about 1850.² Previous to that year practically all the sponges used in the United States came from the Mediterranean grounds or from the Bahama Islands. As European sponges became more costly the Florida reefs were turned to as a source of supply. The industry developed slowly at first, but by 1880 the quantity taken amounted to 207,000 pounds, valued at \$201,000.³ From 1880 to 1900 there was a steady increase in the output, the product for the latter year being valued at \$568,000. For a few years after 1900 the fishery declined somewhat, but the quantity taken in 1908, amounting to 622,000 pounds, was larger than the product of any previous year, though not quite as great in value as the product of 1900. For a number of years, while there was a sufficient supply of sponges to be found in shallow water, it was customary to gather them with hooks attached to long poles, but when the shallow beds became depleted and it was necessary to extend operations to deeper waters, the poles could not be used effectively. As a result of this difficulty Greek divers were brought over from the Mediterranean fisheries in 1884,⁴ but it was found that the diving apparatus destroyed the growth of young sponges, and the Florida legislature enacted a law forbidding the taking of sponges by diving. Toward the end of the century, however, the divers were again introduced to exploit the fisheries lying beyond the three-mile limit. In 1906 Congress enacted a measure to prevent the sale within the United States of sponges taken by diving, but the law has proved unenforceable. At present over one-half of the product is taken by diving apparatus. The fear of the depletion of the fisheries has led to some efforts at cultivation, but so far they have produced only insignificant results.

¹McFarland, *History of the New England Fisheries*, 229.

²Goode, *Fisheries and Fishery Industries of the United States*, sec. v, vol. II, p. 830.

³U. S. Census Report, *Fisheries of the United States, 1908*, p. 104.

⁴*Report of U. S. Commissioner of Fish and Fisheries, 1896*, p. 301.

CHAPTER XXXIV.

THE FISHERIES OF THE GREAT LAKES AND THE MISSISSIPPI RIVER SYSTEM.

Growth of the Great Lakes fisheries, 1880 to 1908, 202. Statistics of the fisheries of the Great Lakes in 1908, 203. Varieties of lake fish, 203. Location of the early Great Lakes fisheries, 204. Fisheries of the Great Lakes after 1870, 205. The culture of fish for the Great Lakes, 206. Fisheries of the Mississippi River and its tributaries, 207. The mussel fishery and the manufacture of pearl buttons, 209. Other river fisheries, 210.

The fisheries of the Great Lakes carried on by the people of the United States and Canada are the most extensive lake fisheries in the world. Though the lake fisheries of the United States have never been of great importance in comparison with those of some of the coastal sections, they nevertheless have been for a long time a valuable source of food-supply for several States and have been no inconsiderable factor in the fisheries of the country as a whole. Established soon after the beginning of the nineteenth century, the commercial fisheries of the lakes gradually increased in extent and value for many years, reaching a maximum quantity of output about 1890. Though the amount of fish caught has declined somewhat since that year, the value of the annual product has risen, the capital invested has increased, and the number of persons employed has changed but little. In recent years even the amount of fish taken has risen slightly in quantity, the catch of 1908 being but little smaller than that of 1890, which was the largest ever recorded.

The catch of fish on the Great Lakes and tributary streams during certain years from 1880 to 1908 and the value of the catch were as follows:

TABLE 76.—*Amount and value of Great Lakes fisheries, selected years, 1880 to 1908.*¹

	1880	1885	1890	1893	1899	1903	1908
Amount (lbs) ..	68,742,000	99,842,000	113,898,531	96,619,671	113,727,240	86,194,817	106,632,000
Value.....	\$1,652,000	\$2,691,966	\$2,471,768	\$2,270,618	\$2,611,439	\$2,745,501	\$3,767,000

¹The statistics are from the *Report of the Commissioner of Fisheries, 1904*, p. 651, and the *Census Report, Fisheries of the United States, 1908*, p. 11.

Though fisheries have been developed on all the lakes, those of Lake Erie and Michigan have always greatly exceeded those of the other lakes in extent and value. In all the years in which statistics of the fishing industries of the Great Lakes have been collected, the products taken from the waters of these two lakes have made up from two-thirds to three-fourths of the value of the total. The fisheries of Lake Erie, being the first to be developed on an extensive scale,

for a long time occupied first place, but for the last few decades the Lake Michigan fisheries have been of almost equal importance with those of Lake Erie, sometimes ranking a close second and often holding first place as regards value of product. The condition of the fisheries of the various lakes in 1908 is shown in table 77.¹

TABLE 77.—*The fisheries of the Great Lakes in 1908.*

	Total.	Lake Superior.	Per-centage of total.	Lake Michigan.	Per-centage of total.	Lake Huron.	Per-centage of total.
Number of persons employed.....	8,533	786	9	2,706	32	1,382	16
Capital.....	\$4,814,000	\$391,000	8	\$1,965,000	41	\$733,000	15
Vessels and boats, including outfit.....	1,651,000	149,000	9	692,000	42	185,000	11
Apparatus of capture.	1,831,000	159,000	9	753,000	41	281,000	15
Shore and accessory properties and cash.	1,332,000	83,000	6	519,000	39	267,000	20
Value of products.....	3,767,000	342,000	9	1,554,000	41	486,000	13
	Lake St. Clair and St. Clair and Detroit rivers.	Per-centage of total.	Lake Erie.	Per-centage of total.	Lake Ontario including Niagara and St. Lawrence rivers.	Per-centage of total.	
Number of persons employed.....	221	3	3,142	37	296	3	
Capital.....	\$46,000	1	\$1,644,000	34	\$35,000	1	
Vessels and boats, including outfit.....	10,000	1	603,000	37	11,000	1	
Apparatus of capture.	8,000	..	615,000	34	16,000	1	
Shore and accessory properties and cash.	28,000	2	426,000	32	7,900	1	
Value of products.....	32,000	1	1,280,000	34	74,000	2	

Over two score varieties of food-fish inhabit the waters of the Great Lakes. Considering the Great Lakes as a whole, the most abundant and most valuable species of fish taken at the present time are, in order, lake herring or ciscoes, lake trout, pike perch, whitefish, yellow perch, German carp, suckers, pike and pickerel. In 1908 these were the only varieties the value of the catch of which amounted in each case to more than \$100,000.² The value of the catch of all eight of these species constituted more than nine-tenths of the value of the entire product of the lake fisheries, and the value of the catch of the first four—lake herring, lake trout, pike perch, and whitefish—made up about three-fourths of the total. Formerly the whitefish were caught in greater abundance than was any other species, and sturgeon occupied a high rank among the products of the lakes; but the catch of whitefish has in recent years been comparatively small, and the sturgeon have fallen to a position of relative unimportance.

¹U. S. Census Report, *Fisheries of the United States, 1908*, p. 12.

²*Ibid.*, 26.

Though the leading varieties of fish are to be found in all of the lakes, they do not by any means occur in all of them in the same abundance. The deeper waters of Lakes Michigan, Superior, and Huron are the favorite abode of the lake trout, over one-half of the product of that species in 1908 coming from Lake Michigan alone. Lake Michigan also leads at present in the production of herring and whitefish, though for a long time the former species was taken in greatest quantities from the shallower waters of Lake Erie. Lake Erie still leads in the production of perches, carp, pike, and pickerel, and the whitefish, too, have been plentiful in this lake. In 1908 either Lake Erie or Lake Michigan was first in the production of the eight leading varieties except suckers, of which the largest catch was taken from Lake Huron.

TABLE 78.—*Value of the catch of the leading species of lake fish in 1908.*¹

	Value.		Value.
Lake herring.....	\$988,000	Yellow perch.....	\$208,000
Lake trout.....	800,000	Carp.....	195,000
Pike perch.....	569,000	Suckers.....	167,000
Whitefish.....	525,000	Pike and pickerel.....	136,000

¹U. S. Census Report, *Fisheries of the United States, 1908*, p. 26.

Just when and where commercial fishing was first prosecuted on the Great Lakes is not known, but it was apparently begun shortly after 1800 in two localities—in the vicinity of Detroit, and at the upper end of Lake Huron in the neighborhood of the Straits of Mackinac and Sault Ste. Marie.¹ Prior to 1800 the lake shores were inhabited by white men in comparatively few places, and though the early settlers at such points as Detroit, Green Bay, Cleveland, Erie, and Buffalo engaged in fishing, their operations were confined entirely to securing a supply of fish for their own consumption. With the increase in the number of settlements on the shores of the lakes and the gradual growth of population, commercial fishing on a small scale soon became possible, and before 1825 several small villages on Lake Erie and Lake Huron had an established fish trade. Small quantities of salted fish were shipped regularly from Mackinac and Detroit to Cleveland and Buffalo during the greater part of the first quarter of the nineteenth century.²

After the opening of the Erie Canal a great wave of migration swept into the territory around the lakes. With the rapid settlement of the region west of the State of New York, there was a great increase in the demand for lake fish and a very rapid expansion of the lake fisheries. During the quarter of a century following 1830 fishing operations were begun along almost every part of the United States shore of the Great Lakes except Lake Superior. The construction of the Ohio and Miami canals opened the way for distributing the fish southward, and within a few years after their completion salted fish from lake ports were sold

¹Report of U. S. Commissioner of Fish and Fisheries, 1887, p. 230.

²*Ibid.*, 211, 267.

all along the Ohio River and even in the cities along the Mississippi River. About 1845 the practice of shipping fresh fish packed in ice was begun at Cleveland, Mackinac, and other places, and in a short time a fresh-fish trade was established that rivaled the trade in salt fish.¹ The construction of railways in the States about the Great Lakes stimulated the fish trade and the fishing industries. The introduction of freezing-houses in the sixties facilitated the handling of the lake products, and the general use of the most advanced types of fishing apparatus enabled the fisheries quickly to reach a high stage of development.² By 1870 the lake fisheries had practically completed their course of evolution and had attained the form which they possess at present. The pound-net was in use at all important fishing centers, the steam-tug was beginning to be employed in the gill-net industry, and the trade in fresh fish was of considerably more value than the salt-fish trade. The fisheries of Lake Superior were well established by that year.

FISHERIES OF THE GREAT LAKES AFTER 1870.

The chief features of the history of the Great Lakes fisheries since 1870 have been the depletion of some of the leading species of lake fish, the recent decline of the lake fisheries as a whole, and the attempts of the Federal and State governments to replenish and maintain the supply of the best varieties of food-fish by means of artificial propagation and restrictive legislation.

Though fluctuating in extent from year to year, the fisheries of the Great Lakes have, on the whole, continued to increase in magnitude until within the past few years, but at the same time there has been since 1880 a distinct decrease in the supply of certain species of fish, the most notable decline being that of the whitefish and the sturgeon. Throughout all the early history of the lake fisheries the whitefish was more sought after and more highly prized than any other species, it being in fact for many years the only variety of any commercial value. As the fishing industries of the lakes developed, the trout of the upper lakes and several other varieties of fish, such as pike perch and yellow perch, sturgeon, herring, and suckers, were added to the list of valuable products, but as late as 1880 the whitefish stood far ahead of the others both in the quantity and value of the annual catch. In that year the amount of whitefish taken represented nearly one-third of the total product of all the lake fisheries, but never since has it occupied such an important position. From 1880 to 1899 the annual yield declined from 21,464,000 pounds to 6,683,000 pounds.³

During the same time the catch of sturgeon, which stood third in importance among the lake fish in 1880, dropped from 7,557,000 pounds

¹*Report of U. S. Commissioner of Fish and Fisheries, 1887*, pp. 211, 265. ²*Ibid.*, 1872, p. 5.

³According to the U. S. Census Report, *Fisheries of the United States, 1908*, p. 78, the whitefish catch was 21,464,000 pounds in 1880; 15,326,000 pounds in 1889; 6,683,000 pounds in 1899; 7,520,000 pounds in 1903; 7,722,000 pounds in 1908.

to 1,082,000 pounds.¹ The sturgeon fishery, like that of the Atlantic coast, has continued to decline and is on the verge of extinction. The whitefish industry seems, however, to have reached its lowest ebb in 1899, and both times that statistics have been taken since that year the amount of whitefish taken has shown a slight increase.

The chief causes of the rapid decline of these fisheries were overfishing, destructive methods of fishing, and the pollution of waters and spawning grounds by sawmills. As in the river fisheries along the Atlantic coast, the fishing operations of the Great Lakes multiplied to such an extent that natural reproduction was insufficient to maintain the supply of fish. It was inevitable that the continued operations of large numbers of nets during the spawning season and over the spawning-grounds, where nets were often set in such profusion as practically to block the passage of the fish, would result in a great depletion of fishing resources. Furthermore, the use of pound-nets of small mesh permitted the capture of great quantities of small fish, which were often carelessly killed by the fishermen. Gill-nets also were responsible for the destruction of large numbers of whitefish during storms, when the nets could not be visited for several days at a time. Often, too, gill-nets would be lost through storms or freezing in the ice, carrying down with them hundreds of pounds of fish, which would decay and drive live fish from the spawning-grounds, thus causing still further loss. The pollution of water with sawmill refuse, especially in parts of the upper lakes where the great lumbering operations were carried on, whereby thousands of tons of sawdust and other refuse were turned into the waters, ruined large spawning areas and destroyed valuable fisheries in many localities.

The herring fishery of the Great Lakes had a period of almost constant growth from 1880 to 1890, the product rising from 15,968,000 pounds to 59,914,000 pounds, but it, too, has shown in recent years a tendency to decline, the catch in 1903 and in 1908 each being smaller than that of 1899.² The catch of 1908, amounting to 41,118,000 pounds, was, however, somewhat larger than that of 1903. Of lake trout, which next to the herring is the most valuable species now taken from the Great Lakes, the catch in 1903, amounting to 16,132,000 pounds, was the largest ever recorded. In 1908 the amount taken was 12,024,000 pounds. The pike-perch product has increased considerably in recent years, and this species will probably continue to advance in rank among the lake fish. Carp, which were introduced into the lakes only 25 years ago, are rapidly becoming one of the valuable fishery products.

For many years efforts have been made to preserve the stock of fish by resorting to artificial propagation and to restrictive laws. The

¹U. S. Census Report, *Fisheries of the United States*, 1908, p. 76.

²*Ibid.*, 60.

fish commissions of some of the States bordering on the lakes and the Federal Bureau of Fisheries have conducted hatching operations on a large scale, and millions upon millions of eggs and young fish have been planted in the lakes in an effort to stay the decline. The whitefish, which long held the position of leading importance among the lake fish, has received the most attention in hatching operations, and it was also the first of the lake fish the artificial propagation of which was conducted on an extensive scale. Experiments in whitefish culture were made as early as 1858, but the first efforts of real importance were made in 1874, when the Michigan Fish Commission succeeded in hatching about 1,500,000 fry.¹ Wisconsin and Pennsylvania followed Michigan in fish-culture, and, in addition to whitefish, large quantities of herring, lake trout, pike perch, and yellow perch have been hatched and planted in the lakes. The United States Bureau of Fisheries has for a number of years operated six hatchery stations on the Great Lakes, two of which are in the State of Michigan, and at present the number of young fish and fertilized eggs distributed from these stations is over a billion a year, the chief species hatched being whitefish, yellow perch, pike perch, trout, and herring.² The activities of the State and Federal authorities in fish-culture have unquestionably prevented the exhaustion of the lake fisheries, and seem also to have checked the decline which set in near the close of the nineteenth century. To supplement the work of fish-culture the States along the Great Lakes have enacted laws providing for closed seasons and regulating the methods of fishing, but lack of concerted and uniform action by the several States has prevented the lake fisheries from receiving the full measure of benefit from the hatching operations and has made the most effective conservation work impossible. However, in recent years restrictive legislation has become more general.

FISHERIES OF THE MISSISSIPPI RIVER AND TRIBUTARIES.

The fisheries of the Mississippi River and its tributaries are, as regards the value of products, almost equal in extent to the fisheries of the Great Lakes, and though they show a much smaller investment of capital, they provide employment for a considerably larger number of persons.³ No statistics of the fisheries of the Mississippi River were collected until about 1880, when the U. S. Fish Commission and the census department cooperated in an effort to secure detailed information concerning them, and of the material collected nothing was published except some general estimates, which indicated that the value of the annual product of the Mississippi River fisheries was at

¹*Report of Michigan Fish Commission, 1884-1886*, Appendix, 98.

²*Report of U. S. Commissioner of Fisheries, 1913*, p. 6.

³On page 11 of the U. S. Census Report, regarding the fisheries of the Mississippi River division in 1908, the capital invested is given as \$1,440,000, the number of persons employed as 11,731, and the value of products as \$3,125,000.

that time about \$1,400,000.¹ In 1894 the U. S. Fish Commission collected detailed information of all fisheries of the interior waters of the United States, which showed the value of the product of the fisheries of the Mississippi and its branches to be about \$1,600,000.² In 1899 and in 1903 the U. S. Fish Commission made similar investigations, the result in both cases showing a steady progress of the fishing industries of this great river system. The report of the Bureau of the Census on the fisheries of the Mississippi River division in 1908 showed a continued progress, the product of the fisheries having attained a total value of \$3,125,000, approximately twice the value of the catch a quarter of a century before.

Eighteen States share the commercial fisheries afforded by the waters of the Mississippi River system. Illinois holds by far the most important position, the river fisheries of that State in 1908 having a product valued at \$1,378,000, or more than 40 per cent of the value of all the fishery products of the Mississippi River division.³ Michigan is the only State not lying along the coast which has more valuable fisheries than Illinois. In each of nine other States in 1908 the products of the fisheries of the Mississippi and its tributaries amounted to more than \$100,000. Table 79 shows the States which in 1908 had fishery products of a value of more than \$100,000 from the Mississippi River and its tributaries.

TABLE 79.—*Fishery products of Mississippi Valley States, 1908.*⁴

State	Value	State	Value
Illinois.....	\$1,378,000	Indiana.....	\$182,000
Missouri.....	271,000	Louisiana.....	121,000
Iowa.....	215,000	Tennessee.....	112,000
Wisconsin.....	215,000	Kentucky.....	110,000
Arkansas.....	207,000	Minnesota.....	109,000

The most valuable fishery products of the Mississippi River district in 1908 were, in order, carp, mussels, buffalo-fish, catfish, fresh-water drum, and black bass. Of each of these varieties the product amounted in value to more than \$100,000. Illinois led in the production of all except catfish, of which species Louisiana contributed the largest quantity.

Carp were introduced into the United States with a view to propagation in 1877, and from 1879 to 1896 they were systematically distributed throughout the country.⁵ Originally they were placed only in private lakes and streams, but it was not long until public waters were stocked, either intentionally, as in certain streams of Illinois and

¹Smith, *Statistics of Fisheries of the Interior Waters of the U. S.*, in Report, U. S. Commissioner of Fish and Fisheries, 1896, p. 490.

²*Ibid.*, 494.

³U. S. Census Report, *Fisheries of the United States, 1908*, p. 118.

⁴Compiled from U. S. Census Report, *Fisheries of the United States, 1908*.

⁵*Ibid.*, 49.

Indiana, or accidentally, through the overflowing of some private carp pond or stream. Being a hardy fish of great fecundity, the carp multiplied with astonishing rapidity, and by 1895 they were being handled by many fish-dealers in the Central States. The carp product of the entire country increased steadily from 2,108,000 pounds in 1894 to 42,763,000 pounds in 1908.¹ In the latter year it ranked tenth in value among the fishery products, the total value of the output being \$1,135,000. Of this amount \$858,000 was contributed by the fisheries of the Mississippi system—\$571,000 by the river fisheries of Illinois alone.

The mussel fishery of the interior waters had its origin in the pearl-fishing operations of the Indians and early white settlers. Until 1891 mussels were taken only for the sake of the pearls which they might contain, and the mussel-shells, which are now the most valuable product of the fishery, were discarded. As long as the search for pearls was the sole object of the industry, the mussel fishery was of comparatively little importance, except at irregular intervals when a rich "find" would start a "craze" for pearl-hunting among the people living along the rivers where mussels were abundant. In 1891 a German mechanic built a factory at Muscatine, Iowa, for the purpose of making buttons out of mussel shells.² His venture proving successful, it was followed by the establishment of additional factories, and by 1899 there were in Iowa, Illinois, Missouri, and Wisconsin a total of 60 button factories, using annually about 12,000 tons of mussel-shells and turning out a product in buttons and button blanks valued at nearly a million dollars.³ With the growth of this industry the mussel fishery developed to a position of prominence. In 1890 mussel-shells were not used at all for commercial purposes; in 1908 nearly 82,000,000 pounds of shells were gathered throughout the country, three-fourths of them coming from the rivers of Illinois, Indiana, and Arkansas.⁴ The value of the shells taken from the Mississippi River and its tributaries was \$386,000, and pearls and slugs of a value of \$300,000 were found by the mussel fishermen. The expansion of button manufacturing has caused a heavy drain on this fishery and it has been almost exhausted in several localities where it was once flourishing. In Iowa the shell product dropped from 20,000,000 pounds in 1899 to 5,000,000 pounds in 1908,⁵ and in Wisconsin during the same time there was a decline from 16,000,000 pounds to 1,000,000 pounds.⁶ The peculiarities of the life-history of the mussel makes artificial propagation exceedingly difficult, and other means, such as the establishment of closed seasons and the fixing of limitations as to the size of mussels to be taken, must be adopted to insure the preservation of this fishery.

¹U. S. Census Report, *Fisheries of the United States*, 1908, p. 50.

²Report of U. S. Commissioner of Fish and Fisheries, 1901, p. 670.

⁴U. S. Census Report, *Fisheries of the United States*, 1908, p. 65.

³*Ibid.*, p. 66.

⁵*Ibid.*, 125. ⁶*Ibid.*, 66.

Until early in the nineteenth century, when the carp and mussel fisheries took precedence, the buffalo-fish and catfish were the most valuable species taken from the Mississippi and its branches. Catfish of various species are found throughout practically the entire United States, but about one-half the usual catch is taken in the Mississippi district. Buffalo-fish are taken on a commercial scale in very few other streams. The product of catfish taken in the Mississippi and its tributaries in 1908 amounted to 8,073,000 pounds, valued at \$395,000; the product of buffalo-fish was 15,040,000 pounds, with a value of \$455,000.¹

Fresh-water drum and black bass, which are the next most important species of the Mississippi system, are found in all the Central States. Of the product of the former taken in this section in 1908, valued at \$129,000, Illinois, Wisconsin, Ohio, and Missouri produced about one-half; and of the product of the latter, valued at \$128,000, over three-fourths came from Illinois, Missouri, and Arkansas.

All of the important fish of the interior waters of the country are artificially propagated and distributed among ponds, lakes, and streams by the United States Bureau of Fisheries and by a number of State commissions. Fishing in both the larger and smaller bodies of water is regulated by law in most States for the purpose not only of preserving the commercial fisheries, but also of maintaining the supply of game fish which provide sport for the army of anglers who frequent stream and lake in search of pleasure and relaxation.

¹U. S. Census Report, *Fisheries of the United States, 1908*, p. 26.

CHAPTER XXXV.

THE FISHERIES OF THE PACIFIC COAST.

Rapid development of Pacific coast fisheries, 211. Location of the most important fishing-grounds, 211. Salmon fisheries, 212. Beginning of salmon canning, 213. Canning of salmon in Alaska, 214. Regulative measures established by State and Federal governments for preservation of salmon, 215. The seal fisheries, 216. The early fur-seal fishery of the Pribilof Islands, 216. Reckless killing of seals, 217. Leases of seal fishery to Alaska Commercial Company and to North American Commercial Company, 218. Pelagic sealing and its destructive effect, 218. Increase of fur-seal herd since 1912, 219. Whale fisheries, 220. Other fisheries, 220. Introduction of Atlantic coast fish to the waters of the Pacific, 222.

The Pacific coast fisheries of the United States, including the fisheries of three States—California, Oregon, and Washington—and of the Territory of Alaska, are of comparatively recent origin, none of them, except the fur-seal fishery, antedating 1850. Notwithstanding the short period of their existence, however, they have developed so rapidly that they rank among the most valuable fisheries of the country. In 1908 the fisheries of the three Pacific States gave employment to 13,855 men, represented a capital investment of \$6,468,000, and had a product of a total value of \$6,839,000.¹ Washington, which was the leading State, with products valued at \$3,513,000, held fourth place among all the States, being surpassed only by Massachusetts, Virginia, and New York. Since the yearly reports published concerning the Alaska fisheries do not give separate data for the fishing industries and the canning industries, statistics are not available for comparison with those just given for the Pacific States. Apparently, however, the fisheries of Alaska in 1908 afforded employment to about 6,000 men and had a product which returned the fishermen approximately \$4,000,000.² The product of all the fishing industries of the Territory for that year, including the canned salmon, which constituted the largest part, was valued at \$11,847,443.

The most important fishing-grounds of the Pacific coast of North America lie from Puget Sound northward. Unlike most of the Atlantic coast, the coast of the three Pacific States is regular and unprotected by outlying islands and bars, and, with the exception of a few rivers such as the Columbia, Klamath, and Sacramento, and some infrequent bays, there are few places adapted to extensive or valuable inshore fisheries. Moreover, the narrow continental shelf provides scant area for offshore fisheries. Consequently, aside from the salmon fisheries in the few bays and rivers, the fisheries of the region south of Puget Sound are relatively of small importance. Northward from Puget Sound, however, the physical conditions are entirely different. Broken by numerous bays and rivers, and lined by almost countless islands, the

¹U. S. Census Report, *Fisheries of the United States, 1908*, p. 11.

²*Ibid.*, 298.

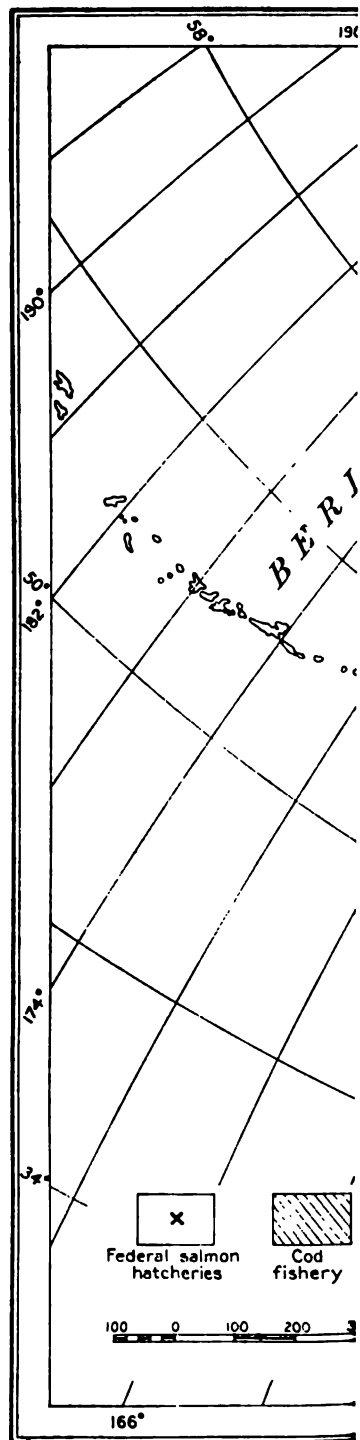
coast affords admirable conditions for extensive fisheries, and the wide continental shelf, with its great expanse of relatively shallow waters, compares favorably with the "banks" of the North Atlantic Ocean as an abode for cod, halibut, pollack, and other ground-fish. In the cold waters of the Arctic region are found the chief whaling-grounds of the present time, and two bleak islands lying in the heart of the Bering Sea have been for nearly a century the most important fur-seal breeding-grounds in the world.

Until just recently the salmon, whale, and fur-seal fisheries were the only important fisheries developed on the Pacific coast. The salmon fishery still holds the position of chief importance, but the whale fishery, which reached the climax of its development a score of years ago, is on the verge of extinction, and the fur-seal industry, which for three-quarters of a century ranked among the most valuable fishing industries of North America, has, by ruthless slaughter of the seals, been reduced to a position of relative unimportance and is kept alive only by careful government regulation and an international agreement for its protection. The ground-fish industry of the Pacific coast has been growing rapidly during recent years. The halibut fishery of Washington, which is by far the largest in the United States, ranks next to the salmon fishery on the Pacific coast, and the cod fishery is rapidly gaining in relative rank.

SALMON FISHERIES.

Among the various fisheries of the Pacific coast the salmon fishery is by far the best known and the most valuable. Of the fishing industries of the entire world only two, the oyster and the herring industries, rank above the industries dependent upon the salmon, and in the United States the salmon industry is exceeded in importance only by the oyster fishery. In the United States the salmon fishery is important only on the Pacific coast. At one time salmon fisheries of some value existed in the rivers of the Atlantic coast, especially in New England, but these were long ago practically exhausted or destroyed and at present are of little significance. On the Pacific slope the salmon is the leading fishery product in each of the three States, as well as in Alaska, and the value of the salmon catch constitutes over two-thirds of the value of the entire product of the Pacific coast fisheries.

The salmon are anadromous fish appearing in very large numbers at regular seasons of the year in practically all the rivers flowing into the north Pacific Ocean, in both Asia and North America. Five species of salmon occur in the north Pacific, all of them being found in greater or less abundance along the American coast, ranging northward from Monterey Bay. Of the five species the most valuable is the chinook, quinnat, or king salmon. It ranges along the coast from Ventura River California, to Norton Sound, Alaska, but is found in greatest abundance



in the Columbia River. The sockeye, blueback, or red salmon, though neither so large nor of such good quality as the chinook, is caught in larger quantities than any of the other species, and forms the greater part of the canned-salmon product. It occurs most plentifully in Alaska and British Columbia, though it is taken in considerable quantities in the rivers of Washington and Oregon, and a few have been found as far south as the Sacramento River. The silver or coho salmon occurs as far south as Monterey Bay, but the largest catch of this species is taken from Puget Sound and its tributaries. The humpback or pink salmon is the smallest of the American species, though it usually ranks next to the blueback as regards the quantity of the yearly catch. It is found in greatest abundance in southeastern Alaska, and is rarely taken in commercial quantities south of Puget Sound. The fifth species is the dog or chum salmon. It has a wide distribution, from San Francisco on the south to Bering Strait on the north, but is most abundant from Puget Sound northward.

Like many other fisheries of the United States, the salmon fisheries of the Pacific States and Alaska were utilized by the Indians and later by the early white settlers, but the first commercial salmon fisheries were started in 1852, when some inhabitants of the settlement which later became the city of Seattle began to catch the fish and sell them, fresh or salted, at various points along the coast.¹ The next commercial enterprise of importance was begun on the Columbia River about 1861, when an establishment for packing salted salmon was started at a place known as Oak Point, about 60 miles below Portland.² It was not until the beginning of the salmon-canning business, however, that the salmon fishery began its rapid growth. The canning industry had its origin on the Sacramento River in 1864, when some natives of New England, who were familiar with the canning of fish in their native States, seeing in the plentiful supply of salmon a possible source of wealth, set up a small salmon cannery on a floating scow opposite the site of Sacramento.³ The first year these men put up about 2,000 cases of 48 one-pound cans to the case. At first no one could be found willing to purchase or even handle the new product, and the venture would have been unsuccessful had not a commission firm sent a part of the pack to Australia. During 1864 and 1865, though the run of salmon in the Sacramento River was light, the canning business was continued, and a small but profitable trade was built up with Australia and the Pacific countries of South America. The light runs of fish in the Sacramento River induced the California canners to visit the Columbia River in 1866 in search of more favorable fishing-grounds. Here they found what seemed to be an inexhaustible supply of salmon, and they at once erected a cannery at Echo Cliff, about 40 miles above Astoria.² Two years later another cannery was established at the

¹Cobb, *The Salmon Fisheries of the Pacific Coast* (Bureau of Fisheries, Doc. No. 751), 12.

²*Ibid.*, 14.

³*Ibid.*, 20.

same place. About the time of the starting of the canneries on the Columbia River a domestic demand for canned salmon began to develop, and with the expansion of the home market, and the foreign market, too, the production of canned salmon grew by leaps and bounds. Canneries were built along every river or bay where there was a salmon run of any importance. By 1880 the canneries on the Columbia River were producing 500,000 cases a year.¹

In 1878 the first canneries were established in Alaska, and about the same time the canning industry was started on the Klamath and Smith Rivers in California and on the coast of Puget Sound.² The Alaska canneries took the lead in production about 1888, and ever since then they have held first place, having in recent years a larger output than all other canneries on the Pacific coast combined. The product of the Alaskan district gradually grew from 8,159 cases in 1878 to 4,056,021 cases in 1912.³ The Columbia River industry, which ranks next to that of Alaska as regards the total output since the beginning of the canning business, has had a product of less than 300,000 cases a year only twice since 1874, and in one year (1895) the output reached 634,696 cases.⁴ The product of the Puget Sound canneries since 1899 has usually ranked next to that of the Alaska canneries. Because of the quadrennial recurrence of the run of sockeye salmon and the biennial appearance of the large run of the humpback species, the Puget Sound industry is subject to great fluctuations, the pack being comparatively small in the even years and exceedingly large in each year following a leap year. For instance, the pack in 1908 was only 448,765 cases and in 1909 was 1,632,949 cases.⁵ These three districts—Alaska, the Columbia River, and Puget Sound—furnish over 95 per cent of the annual canned-salmon output of the United States. Grays Harbor, Willapa Harbor, and the small coastal streams of Oregon contribute a few thousand cases each year, and in some years salmon are canned on the Eel and Klamath Rivers in California. Since 1905 salmon-canning on the Sacramento River has been abandoned, the catch there being mild-cured or sold fresh. Table 80 shows the statistics of salmon-canning in the important districts for a few selected years.

TABLE 80.—*Quantity of salmon canned, selected years, 1870 to 1910.*

Year.	Puget Sound.	Columbia River.	Alaska.	Year.	Puget Sound.	Columbia River.	Alaska.
	<i>cases.</i>	<i>cases.</i>	<i>cases.</i>		<i>cases.</i>	<i>cases.</i>	<i>cases.</i>
1870	.....	150,000	.....	1900	469,450	358,772	1,548,139
1880	5,100	530,000	6,539	1901	1,380,590	390,183	2,016,804
1890	8,000	435,774	682,591	1909	1,632,949	274,087	2,395,477
1899	919,611	332,774	1,078,146	1910	567,883	391,415	2,413,054

¹Cobb, *The Salmon Fisheries of the Pacific Coast* (Bureau of Fisheries Doc. No. 751), 121.

²*Ibid.*, 22, 18. ³*Ibid.*, 122; *Report of Commissioner of Fisheries, 1913*, p. 34.

⁴Cobb, *The Salmon Fisheries of the Pacific Coast* (Bureau of Fisheries Doc. No. 751), 121.

⁵*Ibid.*, 124.

Though by far the largest part of the salmon catch is canned, part of it is consumed fresh and part is prepared for market by mild-curing, pickling, smoking, or freezing. Mild-cured or "sweet-pickled" salmon are salted down lightly in tierces and kept in cold storage until used. In 1909 over 13,000,000 pounds of salmon were prepared in this manner.¹ In the same year about 9,000,000 pounds were pickled in brine, 4,300,000 pounds frozen, and 1,100,000 pounds smoked. During the Russo-Japanese war large quantities of dog salmon were dry-salted for exportation to Japan, but when the war ended and the Japanese fishermen resumed their operations the dry-salting of salmon in the United States was virtually abandoned.²

As has been the case with most of the fisheries in the United States which have at one time appeared inexhaustible, the salmon fishery has been threatened with depletion on account of the evils of extravagant methods of fishing and the reckless destruction of the supply of fish. To meet the danger of exhaustion of the salmon, the Pacific States have enacted regulative measures, while the Federal Government has protected the fisheries of Alaska and has also cooperated with the Canadian Government for the protection of the fisheries of the waters of Puget Sound. In addition to the enactment of the various measures providing for closed season and regulating the methods of fishing, the State and Federal governments have for a number of years conducted extensive hatching operations in all the important salmon-canning districts. Artificial propagation of salmon was first started in California about 1878, when the Federal Government erected a hatchery on the McCloud River for the purpose of securing a supply of fish with which to stock the rivers of the Middle Atlantic States.³ The experiment was a failure as far as the rivers of the Atlantic coast were concerned, but the practice of hatching salmon artificially became a recognized success, and coming just at the time when the growing canning industry was making heavy inroads on the supply of fish, the movement was readily turned to an attempt to maintain the salmon on the Pacific coast. California, Washington, and Oregon each has several hatcheries, and the Federal Government also possesses hatching stations in these States. In Alaska the operators of the salmon canneries voluntarily began to engage in the work of hatching salmon in the early nineties. In 1900 Congress enacted a law requiring the owners of the Alaska canneries to maintain hatcheries and liberate each year red salmon fry to equal four times the number of salmon taken during the fishing season.⁴ In 1902 the required number was increased to ten times the number of all salmon taken.⁵ Although this regulation was compulsory, it was generally neglected, because packers found the operations of hatcheries too expensive or because they possessed no site near their canneries suitable for the erection of hatch-

¹Cobb, *The Salmon Fisheries of the Pacific Coast* (Bureau of Fisheries Doc. No. 751), 137.

²*Ibid.*, 62.

³*Ibid.*, 154.

⁴*Ibid.*, 175.

⁵*Ibid.*, 176.

ing-stations. In 1906 the law was revised. The compulsory feature was eliminated, but to encourage artificial propagation the packers who operated hatcheries were reimbursed for their work by exemption from the payment of license fees on 10 cases of salmon for each 1,000 fry liberated.¹ In 1905 the Federal Government established a hatchery at Yes Bay, Alaska, and another in 1907 on Afognak Lake.² The combined output of the State, Federal, and private hatcheries amounts each year to over a half billion salmon fry. That the salmon run in recent years has maintained its abundance has probably been due to the work of artificial propagation.

SEAL FISHERIES.

Next to the salmon fishery, the fur-seal fishery of Alaska has been the most valuable fishery of the Pacific coast, though for a number of years this industry has been in a precarious state. The fur-seal industry dates back more than a century and a quarter to the discovery and occupation of the Pribilof Islands by the Russians. It was near the close of the seventeenth century that the vanguard of Russian traders pushed across the plains of Siberia and reached the coast of Kamchatka in their quest for fur. There, on the border of the Pacific, they found the beautiful and valuable fur of the sea otter. So vigorously and ceaselessly did they hunt the otters, that by the middle of the eighteenth century these animals were practically exterminated along the Kamchatka coast, and though new hunting-grounds were then discovered on the islands of the Bering Sea, these grounds also were soon exhausted. With the disappearance of the otter the Russians began to take the pelts of the fur-seal, which had received but little attention, while the otters were plentiful. The Commander Islands, which were discovered in 1741, were for a time the chief source of seals, but the supply there was not large. From observations of the migration of an enormous herd of seals through the passes and channels between the Aleutian Islands the Russian traders knew that there were large breeding-grounds to the northward, and they sent several expeditions to seek out the islands which they were certain could be found somewhere in the Bering Sea. In 1786 a trader and navigator by the name of Pribilof came upon one of the sought-for islands, of which he took possession for the Russian Government and named it St. George, after his ship. The next year a second island was discovered and named St. Paul. Two more small islands were subsequently found and the group of four were eventually named after their original discoverer. The two larger islands, St. Paul and St. George, have the most famous seal rookeries in the world. Situated almost in the center of the Bering Sea, where the poleward-moving currents from the Pacific give rise to constant heavy fogs and drizzling mists, they have the cool,

¹Cobb, *The Salmon Fisheries of the Pacific Coast* (Bureau of Fisheries Doc. No. 751), 176.

²*Ibid.*, 177.

moist climate which the seals require, and they are at the same time far enough south to be beyond the reach of permanent ice floes, which would hinder the access of seals to the breeding-grounds. Along with suitable climatic conditions, the islands possess a shingly beach, with neither loam nor sand, which the seals require for their rookeries. No other place in Alaska, either on the mainland or on the chain of Aleutian Islands, has ground of this character.

When the Pribilof Islands were discovered, they were visited annually by millions of seals. A score or more of rival traders hastened to occupy the new grounds, and an indiscriminate and wasteful slaughter of the seal herd was soon in progress. In 1799 the Russian-American Company, a trading company chartered by the Czar, secured the monopoly for twenty years of the fur trade of all the coast of America on the Pacific and of the islands in that ocean from Bering Strait to the fifty-fifth degree of latitude. On securing control of the territory the company at once put a stop to the reckless butchering of seals on the Pribilof Islands. An attempt was then made to limit the extent of killing, but unfortunately for a time no discrimination was exercised as to which seals could be killed. The continuation of the practice of destroying the female seals soon depleted the herd to such an extent that it became necessary to suspend sealing altogether in order that the herd might have time to recuperate. In 1806 and 1807 sealing was suspended and again in 1834.¹ It soon became apparent that the preservation of the herd depended upon the protection of the female seals, and gradually killing was limited to males, and later the breeding males and very young seals also were protected. Under these conditions the herd increased in number again, so that in 1864 the agents of the Russian-American Company, which continued to hold control of the islands from the time of the granting of its first charter until 1867, deemed it possible to take 70,000 seals a year on St. Paul alone.²

With the purchase of Alaska from Russia in 1867, the United States secured possession of the Pribilof Islands. Two men, representing some California and New England interests, went to the islands in 1867, and, taking possession of the rookeries the following year, they slaughtered 300,000 seals.² It was apparent that such wholesale destruction, if long continued, would bring about the speedy extermination of the seal herd. The subject of the protection of the seals was consequently brought to the attention of Congress, which in 1870 enacted a law providing that the season of killing should be limited to June, July, September, and October; that it should be unlawful to kill female seals or seals less than one year old; that for a period of twenty years the annual catch should not be more than 100,000; and that the privilege of sealing should be leased for twenty years by the Secretary of the Treasury, the lessee paying an annual rental of not less than \$50,000

¹Elliott, *The Seal-Islands of Alaska* (U. S. Census 1880), 140.

²Jordan, *The Fur Seals and Fur-Seal Islands*, pt. 1, 26.

and a tax or duty of \$2.62 $\frac{1}{2}$ on each seal taken, and also providing for the maintenance and education of the natives living on the seal islands.¹

In accordance with the provisions of this act the privilege of sealing on the Pribilof Islands was leased to the Alaska Commercial Company, a California corporation. The company was required to make ample provision for the care of the natives and to pay an annual rental of \$55,000, in addition to the stipulated tax or duty on each pelt taken and shipped. In 1890 the sealing privilege was leased to the North American Commercial Company, the terms of the new lease providing for the maintenance of the natives, limiting the number of seals to be killed annually to 60,000, and increasing the yearly rental to \$60,000 and the tax on each pelt secured to \$9.62 $\frac{1}{2}$.¹ When the lease of this company expired in 1910 the leasing system was discontinued and the sealing operations were put directly under the charge of the Secretary of Commerce and Labor. In 1911 the Alaska Fisheries Service was organized and intrusted with entire charge of the supervision of all matters pertaining to the fisheries and fur industries of Alaska. A part of the duties of the officers and agents of this service has been to provide for the care of the natives of the seal islands and to have charge of killing of the seals and the curing and selling of the skins taken.

During the twenty years of the lease of the Alaska Commercial Company the annual catch of seals on the Pribilof Islands amounted to about 100,000, the maximum number permitted by law.² After a few years of slaughter at this rate the seal herd began to diminish rapidly, but instead of reducing the number of seals taken, the company, in order to obtain its full annual quota, resorted even to the destruction of two-year-old and yearling seals. So great was the destruction that the North American Commercial Company, though permitted by the terms of its lease to kill 60,000 seals a year, was able to kill more than 30,000 in only one year during the entire term of its lease, and in several years the number killed was less than 10,000.³ On several occasions it seemed that the seal herd was doomed to extinction.

However, a more potent factor in the reduction of the size of the herd than the catch on the islands was the deep-sea or pelagic sealing. Pelagic sealing has been practiced from time immemorial by the Indians of the northwest coast of North America, who went out in canoes to capture seals in the course of their annual migrations. The number of seals taken in this manner was relatively unimportant, however, until about 1879, when the practice arose of sending vessels from Japan, Russia, the United States, and other countries into the Bering Sea in search of seals. From these vessels and from the numerous canoes sent out by them the swimming seals would be shot with rifles and shotguns. The industry spread so rapidly that within a few years the annual catch of the sealing fleet became an important factor in the skin

¹Jordan, *The Fur Seals and Fur-Seal Islands*, pt. 1, 28.

²Cobb, *The Commercial Fisheries of Alaska in 1905* (Bureau of Fisheries Doc. No. 603), 32.

³*Ibid.*; Lembkey, *The Fur-Seal Fisheries of Alaska in 1909* (Bureau of Fisheries Doc. No. 735), 18.

market, and the depredation of the pelagic sealers began to have a disastrous effect upon the seal herd. Because of the close resemblance of the male and female seals at certain ages, pelagic sealing is necessarily indiscriminate, and seals of all ages and both sexes are subject to slaughter. The killing of the female seals not only resulted in the decimation of the breeding-herd, but caused the death of many young seals left to starve through the killing of their mothers. In 1896, when pelagic sealers were especially active in their operations, over 16,000 young seals starved on the Pribilof Islands.¹ Furthermore, pelagic sealing was accompanied by an enormous waste, because usually only a small percentage of the seals killed or wounded were landed in the vessels from which they were shot.

At the first entry of the pelagic sealers into the Bering Sea the United States Government attempted to establish ownership in the seals and make the Bering Sea a *mare clausum*. This effort was immediately opposed by England, and the Bering Sea controversy began its course. The details of this controversy will be considered in the next chapter. Suffice it to say here that the attempt of the United States to put a stop to pelagic sealing by the citizens of other countries was unsuccessful, and though pelagic sealing by citizens of the United States was prohibited, the ravages of the deep-sea hunters did not come to a final end until 1912, when a convention, entered into by the four nations chiefly interested in the question at issue, provided for the suppression of pelagic sealing.

As a consequence of the stopping of the destruction of seals at sea and of the diminution of the killing on the Pribilof Islands, the seal herd is beginning to increase in numbers again. In 1910 an approximate census of the rookeries of St. George and St. Paul showed a herd numbering 132,279. In 1912 a census showed a herd of 215,940 seals, and in 1913 the number had increased to 268,305.² The killing has been limited to two- and three-year-old "bachelor" seals, and in 1913 a law went into effect providing that for five years the number of seals killed should be restricted to an amount sufficient to supply the needs of the inhabitants of the islands for food.³ Under these conditions the herd is certain to increase in size, and it should be only a few years until the rookeries are again thickly populated during the breeding-season.

Both to the commercial companies to which the sealing privileges were leased and to the United States the fur-seal fishery has been extremely profitable. The average price of seal skins taken on the island from 1870 to 1880 was about \$10, from 1880 to 1900 it was more than \$20, and since 1900 it has been more than \$30. The receipts of the Government from the rentals and taxes imposed on the two lessees were about \$10,000,000, a sum considerably greater than that paid for the entire Alaska Territory. Since the Government took charge of

¹Jordan, *The Fur Seals and Fur-Seal Islands*, pt. I, 169.

²Report of U. S. Commissioner of Fisheries, 1913, p. 37.

³Everman, *Alaska Fisheries and Fur Industries in 1913* (Bureau of Fisheries Doc. No. 797), 156.

the killing, the annual income from the sale of skins has averaged about \$200,000. In addition to the income from the seal skins, the Government also derives a small revenue from the sale of pelts of other fur-bearing animals of the Pribilof Islands.

WHALE FISHERIES.

The whaling industry began on the Pacific coast of the United States in 1850, when an old whaling vessel, the *Popmunnett*, was dispatched from San Francisco on a voyage to the Galapagos Islands and the coasts of Chile and Peru.¹ With the exception of a small shore whaling industry carried on from 1855 to 1887, at Monterey, Crescent City, and a few other points in California, the entire whaling industry of the western coast was confined to the operations of vessels from the port of San Francisco, until in 1913, when a few vessels were reported from Juneau, Alaska.² At San Francisco whaling was of but little importance for a number of years after its beginning in 1850. From 1850 to 1860, while the industry was at its maximum of prosperity in New England, San Francisco had but little interest in the business, and as late as 1879 the fleet of that port numbered only three vessels, of a total burden of 630 tons. Commencing in 1880, however, the San Francisco fleet gradually increased in size. Some New England interests transferred their vessels to California, oil refineries were erected at San Francisco, steam whaling-vessels and improved killing methods were introduced, and for a time the business was prosperous. The climax was reached in 1893, when the San Francisco fleet consisted of 33 vessels, of a total of 8,502 tons. Thereafter whaling declined on the Pacific coast, just as it had declined years before in New England. The best year of the San Francisco fleet was in 1891, when its product of bone and oil reached a value of \$1,190,000.³ In 1892 the value of the product was \$1,000,000, but in 1895 it fell to \$307,000, and in 1908 it was only \$132,000. The fleet constantly diminished in size, the vessels registered from the port in 1913 numbering only 10, half of them sailing vessels and half steam, the tonnage of the entire fleet amounting to 3,341 tons. From Juneau six steam whaling-vessels were reported in 1913, with a total burden of 764 tons.

OTHER FISHERIES.

Though the whale and the fur-seal fisheries of the Pacific coast have suffered a decline, the loss has been to a large extent compensated for by the rise of other fisheries, most important of which are the halibut and cod. Some of the best halibut grounds in the world are found along the coasts of Washington, British Columbia, and Alaska, and climatic conditions do not, as on the Atlantic coast, render halibut fishing excessively dangerous and expensive. The halibut fishery

¹Tower, *History of the American Whale Fishery*, 60.

²*Report of Commissioner of Navigation, 1913*, p. 195.

³U. S. Census Report, *Fisheries of the United States, 1908*, p. 77.

began on the western coast as early as 1868, when some New England vessels visited the Puget Sound district and took about 240,000 pounds of fish. Because of the sparse population and the high costs of transportation eastward, this initial venture was not very profitable, and though the business was continued it grew but slowly, the entire product of the Pacific coast as late as 1888 amounting to only a little over 1,000,000 pounds.¹ The increasing demand for halibut, both in the Pacific and in the Eastern States, and the improvement of the facilities for transcontinental shipment of perishable products, soon stimulated the fishery greatly, however, and the decline of the catch of the New England fleet caused an enlargement of the market for the halibut taken on the Pacific coast. By 1904 the catch of Washington, which is the only one of the Pacific States having an extensive halibut fishery, amounted to 12,000,000 pounds; in 1908 it was 30,000,000 pounds, and in 1912, about 35,000,000 pounds. The value of the annual catch of the fishermen of Washington alone now approximates \$2,000,000. In Alaska, too, there is a large and growing halibut fishery. In 1908 the Alaska fishermen took 4,500,000 pounds of halibut and in 1910 their catch amounted to 21,000,000 pounds.²

The cod-fishing grounds off the coast of Alaska were discovered in 1866. For a time the fishery developed rapidly, but because of the lack of a market and the tendency of capital to seek investment in the promising salmon fisheries, it soon declined and remained comparatively unimportant until about 1890, when the introduction of the new method of preparing the cod as boneless fish again stimulated an interest in the fishery. Cod fleets were gradually built up in both Washington and California, and the combined catch of both States has in recent years amounted to more than 7,000,000 pounds annually.³ Alaska also has a cod fishery, the annual catch there approximating 5,000,000 pounds. Both the cod and halibut fisheries have helped stimulate the herring fisheries of the Alaska coast, large quantities of herring being taken and sold for bait to the cod and halibut fishermen. Part of the herring catch is converted into oil and fertilizer, and lately a part of it has been smoked and pickled for food.

The oyster fishery of the Pacific States, which ranks next to the halibut industry in point of value, is of only minor importance in comparison to the great oyster fisheries of the Atlantic coast. Only a few places on the Pacific coast are suitable for oyster-beds, the most important localities being San Francisco Bay, California; Yaquina Bay, Oregon; and Willapa Bay, Grays Harbor, and the bays and inlets of Puget Sound, Washington. Since in these places even the oyster grounds are usually exposed at low tide, the oysters are in constant danger of freezing in winter. The native oysters of the Pacific States

¹U. S. Census Report, *Fisheries of the United States, 1908*, p. 58.

²*Report of U. S. Commissioner of Fisheries, 1911*, p. 25.

³U. S. Census Report, *Fisheries of the United States, 1908*, p. 53; *Report of U. S. Commissioner of Fisheries, 1913*, p. 62.

are of an inferior quality, and the eastern oysters which are planted along the coast do not propagate. Because of these conditions and because of the limited area suitable for oyster-grounds, it is not likely that the oyster fishery of the Pacific States will ever be of great value. In recent years, in fact, it has shown a tendency to decline, the output of 213,579 bushels in 1912 being less than half the quantity gathered in 1899.¹ But on account of their scarcity the oysters command a very high price, the small product in 1912 being valued at \$676,243.

An interesting feature of the history of the fisheries of the western coast has been the introduction of valuable species of fish indigenous to the waters along the Atlantic coast, and hitherto unknown on the west coast. The first experiments in this line were made with the shad, a number of small plants of which were deposited by the United States Fish Commission in the Sacramento and Columbia Rivers between 1871 and 1886.² The experiments were remarkably successful, and not only have the shad become abundant in the rivers where the plants were made, but they have migrated and established themselves in practically all the rivers for a distance of 4,000 miles along the coast from Los Angeles County to Cook Inlet. Since 1886 the shad has been one of the most abundant food-fish of California, though because of the small demand the catch is yet small compared to what it might be. However, in 1908, California reported a shad product of over 1,000,000 pounds, and Washington and Oregon each had an established shad fishery.³ The striped bass has also been successfully introduced on the Pacific coast and efforts are being made to colonize the lobster.

Considered as a whole, the fisheries of the Pacific coast are steadily growing in value and importance. Though the salmon fisheries still outrank all other fisheries combined, the rapid growth of the halibut and cod fisheries and the conservation of the fur-seal fishery mean that before long the importance of the salmon will be comparatively less. Furthermore, great fishing resources along the Alaska coast are yet practically untouched. Of 300 species of fishes known to inhabit the waters of Alaska, less than a score are utilized as food, and of a large number of varieties of shellfish, both mollusk and crustacean, a small portion is being used. Large areas of cod-fishing grounds remain unexploited, and the halibut fishery has by no means reached the limit of expansion. The herring alone, which as yet are used chiefly for oil, fertilizer, and bait, are sufficiently abundant to support sardine and smoked-herring industries as large as those on the Atlantic coast. Capelin, smelt, trout, clams, crabs, and many other valuable species exist in large quantities in Alaskan waters. No place in North America offers more favorable opportunities for the development of valuable fishing industries.

¹Report of U. S. Commissioner of Fisheries, 1913, p. 49.

²Smith, *The U. S. Bureau of Fisheries, Its Establishment, Functions, etc.* (Bureau of Fisheries, Doc. No. 725), 1403.

³U. S. Census Report, *Fisheries of the United States, 1908*, p. 71.

CHAPTER XXXVI.

THE FISHERIES AS AN INTERNATIONAL QUESTION.

Treaties of 1783 and 1818, 223. Controversy over treaty of 1818, 224. Seizures under the "headlands theory," 225. The Reciprocity Treaty of 1854, 226. Attempts of Canada to restrict operations of American fishermen, 1868-1870, 227. The Treaty of Washington, 1871, 227. The Chamberlain-Bayard Convention and *modus vivendi* of 1888, 229. The Blaine-Bond Convention of 1890 and the Bond-Hay Convention of 1902, 230. Agreement to arbitrate North Atlantic fisheries dispute, 1909, questions submitted, 231. Decision of the arbitration tribunal, 232. Controversy over the fur-seal fisheries, 235. Questions submitted to arbitration in 1893, 236. Award of the arbitrators in the fur-seal controversy, 237. Agreement of United States, Great Britain, Russia, and Japan regarding fur-seal fisheries, 1911, 238.

The Government of the United States, in attempting to protect and extend the fishing interests of the country, has become involved in two important international controversies—one with respect to the fisheries of the North Atlantic Ocean and the other with respect to the fur-seal fisheries of the Bering Sea.

TREATIES OF 1783 AND 1818.

The North Atlantic fisheries question had its origin in 1783, at the time of the signing of the treaty of peace in which England acknowledged the independence of the thirteen States. Under the provisions of that treaty the people of the United States were confirmed in their right to take fish on the Newfoundland banks and at other places in the sea which they had been accustomed to visit, and they also secured from Great Britain the liberty to take fish on the coasts, bays, and creeks of all parts of the British possessions in America, as well as the privilege of drying and curing fish in the unsettled bays and harbors of Nova Scotia, Labrador, and the Magdalen Islands. At the time of the negotiation of the treaty of peace following the War of 1812, the question arose as to whether the fishery concessions contained in the Treaty of Paris had been terminated by the war. The British commissioners affirmed that, by making war on Great Britain, the United States had lost the fishing privileges; the American commissioners took the position that those privileges remained undisturbed. It was impossible to reach a mutually satisfactory agreement on the subject, and the treaty was eventually signed without reference being made to the fisheries. Shortly after peace was established, the British authorities in Canada, acting in pursuance of the theory that the United States had forfeited the concession made in 1783, seized several New England vessels engaged in fishing along the coast of Nova Scotia.¹ Though the vessels were subsequently released, the British Government persisted in declaring its right to exclude all vessels of the United States from the

¹*Proceedings in the North Atlantic Coast Fisheries Arbitration*, I, "The Case of the United States," 42.

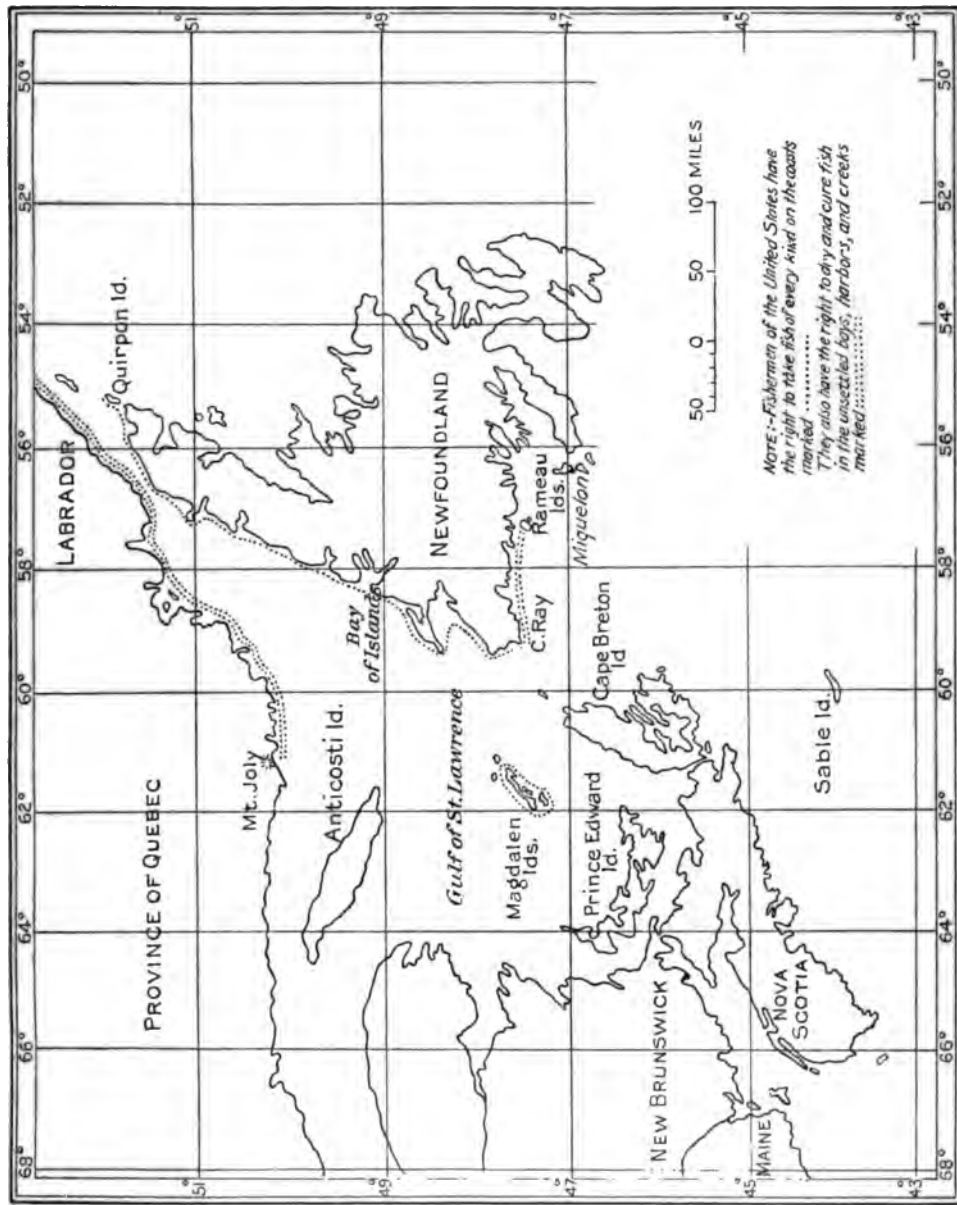
coast fisheries of British territory. With the two governments holding diametrically opposing views, it was necessary, in order to avert a serious collision, to negotiate a new treaty, and accordingly in 1818, when the general commercial treaty between the two nations was renewed, an agreement concerning the fisheries was included. This agreement, which constituted Article I of the treaty, was as follows:¹

"Whereas differences have arisen respecting the Liberty claimed by the United States for the inhabitants thereof, to take, dry and cure Fish on Certain Coasts, Bays, Harbours, and Creeks of His Britannic Majesty's Dominions in America, it is agreed between the High Contracting Parties, that the inhabitants of the said United States shall have forever, in common with the Subjects of His Britannic Majesty, the Liberty to take Fish of every kind on that part of the Southern Coast of Newfoundland which extends from Cape Ray to the Rameau Islands, on the Western and the Northern Coast of Newfoundland, from the said Cape Ray to the Quirpon Islands, on the shores of the Magdalen Islands, and also on the Coasts, Bays, Harbours and Creeks from Mount Joly on the Southern Coast of Labrador, to and through the Straights of Belleisle and thence Northwardly indefinitely along the Coast, without prejudice however, to any of the exclusive Rights of the Hudson Bay Company: And that the American fishermen shall also have liberty forever, to dry and cure Fish in any of the unsettled Bays, Harbours, and Creeks of the Southern part of the Coast of Newfoundland hereabove described, and of the Coast of Labrador; but so soon as the same, or any portion thereof, shall be settled it shall not be lawful for the said Fishermen to dry or cure Fish at such Portion so settled, without previous agreement for such purpose with the Inhabitants, Proprietors, or Possessors of the ground. And the United States hereby renounce forever, any Liberty, heretofore enjoyed or claimed by the Inhabitants thereof, to take, dry or cure Fish on, or within three marine Miles of any of the Coasts, Bays, Creeks or Harbours of His Britannic Majesty's Dominions in America not included within the above-mentioned limits: Provided however, that the American Fishermen shall be admitted to enter such Bays or Harbours for the purpose of Shelter and of repairing Damages therein, or purchasing Wood, and of obtaining Water, and for no other purpose whatever. But they shall be under such Restrictions as may be necessary to prevent their taking, drying or curing Fish therein, or in any other manner whatever abusing the Privileges hereby reserved to them."

It was thought at the time that in this convention an amicable solution of the fisheries question had been reached, but serious disagreements soon arose as to the meaning of various passages of the treaty, and for almost a century, until the interpretation of the words of the agreement was determined by a court of arbitration in 1910, the fisheries question was a source of almost constant friction between the governments of the United States and Great Britain.

The first serious controversy over the meaning of the treaty, which arose in 1839, had to do with the phrase "within three marine miles of any of the Coasts, Bays, Creeks or Harbours of His Britannic Majesty's Dominions in America." For several years subsequent to the conclusion of the treaty the fishermen of the United States were allowed to fish

¹*Proceedings in the North Atlantic Coast Fisheries Arbitration*, II, 25.



MAP 10. FISHING PRIVILEGES OF THE UNITED STATES UNDER THE TREATY OF 1818.
(From McFarland's *History of the New England Fisheries*.)

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in any of the bays and harbors of the non-treaty coasts, so long as they did not pursue their operations within 3 miles of the shore. In 1839 the government of Nova Scotia announced that vessels fishing within 3 miles of the mouth of a bay, that is, within 3 miles of a line drawn from headland to headland, would be considered as having violated the renunciatory agreement made by the United States in 1818.¹ This startling interpretation of the treaty was thought in the United States to be a part of a studied policy to hamper the New England fishing industries, the competition of which, especially in the mackerel industry, the Nova Scotia fishermen were keenly feeling. In 1836 the legislature of Nova Scotia had passed a "hovering act," under the provisions of which the provincial authorities were able to subject the fishermen from the United States to many vexatious restrictions, but all the early seizures under this law were made for acts alleged to have been committed within 3 miles of the land.² Under the new interpretation seizures could be made anywhere in the great indentations of the Nova Scotia coast, such as the Bay of Fundy and the Bay of Chaleurs, in which the fishermen of the United States for years had pursued their calling unmolested.

Two seizures were made under the "headlands theory." The first occurred in May 1843, when a customs officer of Nova Scotia seized the fishing schooner *Washington* while engaged in fishing in the Bay of Fundy about 10 miles off the coast, and the second, in August 1844, when the schooner *Argus* was taken while fishing about 15 miles off the Cape Breton coast, but according to the report of the officer making the seizure, "still much within the bay that is formed by a straight line drawn from Cape North to the northern head of Cow Bay."³ Both schooners were condemned and sold. The United States Government lodged a vigorous protest against the enforcement of the "headlands doctrine," contending that the treaty entitled American vessels to engage in fishing operations anywhere along the coast 3 miles or more from the shore. The British Government, though not abandoning the doctrine of headlands asserted by Nova Scotia nor disavowing the seizure of the two schooners, consented in April 1845, as a matter of expediency, to relax the rule as regards the Bay of Fundy, and, but for the opposition of Nova Scotia, would have extended the relaxation for the time being to all other bays.⁴ Under the Claims Convention of 1853 the claims of the owners of the *Washington* and the *Argus* were referred to a joint commission. The commission disagreeing, the cases were referred to an umpire, Mr. Joshua Bates, who decided in favor of the claimants in both instances, and at the same time sustained the contention of the United States as to the meaning of the word "bays," as used in the treaty of 1818.⁵

¹*Proceedings in the North Atlantic Coast Fisheries Arbitration*, I, 95; IV, 77.

²*Ibid.*, I, 82-94.

³*Ibid.*, I, 114; IV, 80.

⁴*Ibid.*, IV, 82; I, 118.

⁵*Ibid.*, I, 131.

At the time of the relaxation of the headlands rule as regards the Bay of Fundy, Lord Aberdeen, the British Secretary of State for Foreign Affairs, suggested to Mr. Everett, the United States minister at London, that, as a step toward a possible solution of the fisheries controversy the United States might remove the prohibitive duties at that time imposed on Canadian fish. In May 1846, the Canadian Parliament urged the negotiation of a treaty providing for reciprocal freedom of trade between Canada and the United States in some products of the two countries, and subsequently the British colonies proposed that, in exchange for the removal of the tariff duties on their fish, they would be willing to admit the fishermen of the United States to all the coast fisheries which had been renounced in the treaty of 1818. This plan of settlement was first strongly opposed in the United States. In 1852 the British Government sent a small fleet of war vessels to the Nova Scotia coast, ostensibly for the purpose of enforcing the headlands doctrine with regard to all bays except the Bay of Fundy.¹ For a time the relations between the United States and Great Britain were extremely critical. In 1854 Lord Elgin was dispatched to Washington for a conference with Secretary of State Marcy, and as a result of this conference the United States Government consented to the negotiation of a new treaty relating to the fisheries, commerce, and navigation, known as the Reciprocity Treaty of 1854.²

RECIPROCITY TREATY, 1854, AND TREATY OF WASHINGTON, 1871.

By this treaty the fishermen of the United States secured liberties similar to those granted in 1783, being admitted to all the sea fisheries on the coasts of British dominions in America; and British subjects in turn were granted the "liberty to take fish of every kind, except shell-fish, on the eastern seacoasts and shores of the United States, north of the 36th parallel of north latitude, and on the shores of the several islands thereunto adjacent, and in the bays, harbors, and creeks of the said seacoasts and shores of the United States and of the said islands." The treaty was to last for a fixed period of 10 years and thereafter could be terminated by either party on 12 months' notice. During the time the treaty was in force there was no dispute between the two countries concerning the fisheries, but at the end of 11 years the United States Government, partly because of the dissatisfaction of the farming interests with the reciprocity provisions, and partly because it was thought that the remission of the duty on Canadian fish was of greater value than the concessions granted to the fishermen of the United States, decided to abrogate the treaty, and it consequently became inoperative in 1866, the fisheries relations being left to rest again on the uncertain provisions of the convention of 1818.

Before the reciprocity treaty expired, negotiations were opened between the two governments with a view to making some new arrange-

¹*Proceedings in the North Atlantic Coast Fisheries Arbitration*, I, 122.

²*Ibid.*, II, 25.

ment, and pending the conclusion of negotiations the Canadian Government sold licenses to fishermen of the United States desiring to engage in the inshore fisheries of the Canadian coast.¹ At the same time, however, the Dominion Government, to which had been given the authority for the regulation of the fisheries, enacted a law (1868) similar to the Nova Scotia "hovering act" of 1836, imposing extreme restrictions on the operations of all fishing-vessels possessing no special license.² In 1870 the license system was discontinued, and under the provision of the act of 1868 a number of seizures were made. Two of these seizures, those of the *White Fawn* and the *J. H. Nickerson*, were especially significant in that they represented the first attempts of the Canadian Government to restrict the commercial operations in which fishing-vessels of the United States had for a long time been permitted to engage. Though the convention of 1818 provided that American fishermen should be permitted to enter the bays and harbors of non-treaty coasts for purposes of obtaining shelter, repairing damages, and securing water and wood, and *for no other purposes whatsoever*, the statute which had been enacted to carry the treaty into effect had imposed no penalty for any action except "fishing or preparing to fish" in the territorial waters of British coasts, and consequently the American fishermen had for a long time freely entered all Canadian ports to purchase bait and all kinds of necessary supplies. Since the courts administered only the statutes and not treaties, it seemed impossible, under the existing laws, to interfere with these commercial privileges. However, in the cases of the *J. H. Nickerson* and the *White Fawn* an attempt was made to identify the purchase of bait with an act of "preparing to fish" and thus render the vessels liable to confiscation. In one of these cases it was decided that the purchase of bait did constitute an act of "preparing to fish," but in the other case a directly opposite decision was rendered, and the question was left for the time being in a most uncertain status.³

In 1871, when the Joint High Commission met at Washington to settle several controversies that had arisen between Great Britain and the United States, a new treaty, known as the Treaty of Washington, was concluded, which contained a series of articles relating to the fisheries question. By this treaty arrangements similar to those provided for in the treaty of 1854 were effected, the chief difference being that reciprocal freedom of trade was restricted to fish-oil and fish, and that the southern limit within which British fishermen might have the liberty of engaging in the sea fisheries along the eastern coast of the United States was fixed at 39 degrees north latitude. It was stipulated, too, that the provisions of the treaty should extend to the colony of Newfoundland, and thus the inshore fisheries of the entire coast of that island were thrown open to the fishermen of the United States.

¹*Proceedings in the North Atlantic Coast Fisheries Arbitration*, IV, 13; I, 138.

²*Ibid.*, II, 133.

³*Ibid.*, IV, 414, *et seq.*

This treaty also was to remain in force for a period of ten years, and thereafter until the expiration of two years after notice was given by either country of a wish to terminate the agreement. The British commissioners who helped negotiate this treaty contended that by its provisions the people of the United States received a much more valuable concession than they gave. Though dissenting from this view, the commissioners of the United States agreed to the appointment of a commission which should decide the question and award monetary compensation to Great Britain for whatever loss that country had sustained. The commission which was appointed to decide the question met in 1877 at Halifax and awarded the British Government the sum of \$5,500,000, which the United States somewhat protestingly paid.¹ In 1883 the President of the United States was directed by Congress to give notice of the termination of the fishery provisions of the Treaty of Washington, and in 1885 they became inoperative.

Until the time of the adoption of the treaty of 1871, the most serious issue that had arisen with respect to the fisheries was the "headlands doctrine"; but while the treaty of 1871 was still in effect and during the few years immediately following its abrogation several new phases of the controversy arose and came into prominence. Chief among the new sources of disagreement were the question concerning the right of the Canadian and the Newfoundland governments to enforce certain domestic regulations of the fisheries against fishermen of the United States, and the question concerning the right of the fishermen of the United States to exercise commercial privileges not specifically accorded to them in the convention of 1818. In 1878, just a few months after the announcement of the award of the Halifax Commission, while some fishermen of the United States were taking herring in Fortune Bay, they were attacked and driven away by a mob of Newfoundland inhabitants, who justified their action on the grounds that the United States fishermen were violating Newfoundland statutes regulating the herring fishery and prohibiting fishing on Sunday.² The Government of the United States, contending that under the treaty of 1871 the American fishermen were not amenable to the local regulations of Newfoundland, presented a claim for damages to Great Britain. Though compensation was secured for the injuries suffered by the fishermen, the British Government paid it on the grounds that the Newfoundland people had done wrong in taking the law into their own hands, and refused to agree to the contention of the United States that the Newfoundland regulations were not binding on American fishermen. The question as to the commercial privileges of American fishermen had been left in doubt by the conflicting decisions in the cases of the *White Fawn* and the *J. H. Nickerson* in 1870-71. This doubt the Canadian Government attempted to dispel, the next year after the termination of the fishery provisions of the treaty of 1871, by the enactment of a statute

¹*Proceedings in the North Atlantic Coast Fisheries Arbitration*, I, 161.

²*Ibid.*, 162.

providing for the seizure of all foreign fishing-vessels which entered Canadian waters for any purpose not permitted in treaty or convention.¹ Against this statute there was a spirited protest on the part of the American fishermen, which resulted in the enactment by the United States Congress, in 1887, of a retaliatory measure by which the President was empowered, at his discretion, to deny any vessel of the British dominions in America entrance into ports of the United States, with such exceptions in regard to vessels in distress or in need of supplies as the President might deem proper to make.²

The acute situation engendered by the stringent legislation of both Canada and the United States led to an effort to establish a new treaty, and in 1888 a convention, known as the Chamberlain-Bayard Convention, was negotiated, dealing with the questions of bays and commercial privileges. At the same time a temporary arrangement was established in order to afford a *modus vivendi* pending legislative action on the convention. This *modus vivendi* provided that, for a period of 2 years, the privilege of entering the bays and harbors of the Atlantic coasts of Canada and Newfoundland for the purposes of purchasing bait and other supplies, the transshipment of fish, and the shipping of crews, should be granted to the United States fishing-vessels by annual licenses at a fee of \$1.50 per ton. It further stipulated that, if the United States would remove the import duties on fish, fish-oil, whale and seal oil, the licenses should be issued free of charge; that fishing-vessels entering Canadian and Newfoundland harbors for any of the four purposes mentioned in the treaty of 1818 and not remaining more than 24 hours should not be required to enter and clear at a custom-house; and that forfeiture was to be exacted only for the offense of fishing or preparing to fish in territorial waters. The Chamberlain-Bayard Convention failed of ratification in the United States Senate, and consequently never became operative. Between the United States and Canada the *modus vivendi* of 1888 remained in effect, and it has ever since, without formal extension, constituted the basis of the relations between the two countries, as regards the North Atlantic fisheries. The controversy between the United States and Newfoundland, however, did not come to an end.

The Newfoundland people desired the free admission of their fishery products into the United States, and their government attempted to force the concession of this privilege by imposing restrictive regulations on the operations of the United States fishermen. The most important of these regulations had to do with the sale of bait, for which article the fishermen of the United States had long been largely dependent upon the shore fisheries of Newfoundland. In the years just after the termination of the agreement contained in the treaty of 1871, Newfoundland enacted statutes prohibiting the sale, within the juris-

¹*Proceedings in the North Atlantic Coast Fisheries Arbitration*, IV, 14; V, 1066.

²*Ibid.*, I, 200; II, 96.

diction of the colony, of bait, ice, and other supplies to foreign fishermen, unless they obtained special licenses from the Newfoundland Government. In 1890, the Blaine-Bond Convention was negotiated, affecting the relations between the United States and Newfoundland. This convention granted to United States fishermen the right to purchase bait in the waters of Newfoundland on the same terms as were enjoyed by Newfoundland fishermen, and provided for freedom of trade between the United States and Newfoundland in certain products, among which were products of the fisheries. The agreement was not ratified, however, and the license system continued to prevail. In 1893, Newfoundland enacted a law, known as the foreign fishery vessels act, which continued the license system and contained additional regulations providing that no foreign fishing-vessel should, without license, engage any part of its crew within Newfoundland waters.¹ In 1902 the Bond-Hay Convention was negotiated, containing provisions similar to those of the Chamberlain-Bayard agreement, but again the Senate declined to ratify the convention.

In 1905 the Newfoundland Government, intent upon compelling the free admission of Newfoundland fishery products into the United States, took the step of repealing the previous laws regulating the fisheries, and enacted a new law which prohibited altogether the purchase of bait by foreign fishery vessels and the engagement by them of crews within Newfoundland waters.² Furthermore, the act authorized certain officers to go aboard any foreign fishing-vessel coming within 3 miles of Newfoundland, and declared that the presence on board any such fishing-vessel of any bait-fish should be considered as *prima facie* evidence of the purchase of such bait-fish within Newfoundland waters, thus depriving the foreign fishermen in whose possession the bait was found of the presumption of innocence to which they were naturally entitled. Since this act applied to the treaty coasts as well as to the non-treaty coasts, the United States Government, contending that under the convention of 1818 the inhabitants of the United States, whose vessels resorted to the treaty coasts for the purpose of exercising the privileges granted by the convention, were also entitled, when duly authorized by the United States, to exercise the commercial privileges accorded to United States trading-vessels generally, lodged a vigorous protest with the British Government against the enforcement of the act. The ensuing diplomatic interchanges resulted in the establishment in 1906 of a *modus vivendi*, whereby the law was suspended for the time being and other arrangements effected to enable the United States fishermen to pursue their operations on the treaty coasts without undue molestation. This *modus vivendi* was renewed, with some modifications, in 1907 and in 1908.

¹Proceedings in the North Atlantic Coast Fisheries Arbitration, V, 1234.

²*Ibid.*, 1284.

ARBITRATION OF NORTH ATLANTIC FISHERIES DISPUTE.

In 1907, Mr. Reid, the United States ambassador to Great Britain, suggested to Sir Edward Grey, the British Secretary of State for Foreign Affairs, that the fisheries controversy be submitted to the Hague Tribunal for arbitration. To this proposition the British Government agreed, and in 1909 a special agreement was concluded providing for the arbitration of the important points at issue.¹ The Court of Arbitration met in 1910, and the following questions were submitted to it for adjudication:

Question 1. To what extent are the following contentions or either of them justified?

It is contended on the part of Great Britain that the exercise of the liberty to take fish referred to in the said article, which the inhabitants of the United States have forever in common with the subjects of His Britannic Majesty, is subject, without the consent of the United States, to reasonable regulation by Great Britain, Canada, or Newfoundland in the form of municipal laws, ordinances, or rules, as, for example, to regulations in respect of (1) the hours, days, or seasons when fish may be taken on the treaty coasts; (2) the method, means, and implements to be used in the taking of fish or in the carrying on of fishing operations on such coasts; (3) any other matters of a similar character relating to fishing; such regulations being reasonable, as being, for instance—

(a) Appropriate or necessary for the protection and preservation of such fisheries and the exercise of the rights of British subjects therein and of the liberty which by the said Article I, the inhabitants of the United States have therein in common with British subjects;

(b) Desirable on grounds of public order and morals;

(c) Equitable and fair as between local fishermen and the inhabitants of the United States exercising the said treaty liberty and not so framed as to give unfairly an advantage to the former over the latter class.

It is contended on the part of the United States that the exercise of such liberty is not subject to limitations or restraints by Great Britain, Canada, or Newfoundland in the form of municipal laws, ordinances, or regulations in respect of (1) the hours, days, or seasons when the inhabitants of the United States may take fish on the treaty coasts, or (2) the method, means, and implements used by them in taking fish or in carrying on fishing operations on such coasts, or (3) any other limitations or restraints of similar character—

(a) Unless they are appropriate and necessary for the protection and preservation of the common rights in such fisheries and the exercise thereof; and

(b) Unless they are reasonable in themselves and fair as between local fishermen and fishermen coming from the United States, and not so framed as to give an advantage to the former over the latter class; and

(c) Unless their appropriateness, necessity, reasonableness, and fairness be determined by the United States and Great Britain by common accord and the United States concurs in their enforcement.

Question 2. Have the inhabitants of the United States, while exercising the liberties referred to in said Article, a right to employ as members of the fishing crews of their vessels persons not inhabitants of the United States?

¹*Proceedings in the North Atlantic Coast Fisheries Arbitration*, I, 26.

Question 3. Can the exercise by the inhabitants of the United States of the liberties referred to in the said Article be subjected, without the consent of the United States, to the requirements of entry or report at customs-houses or the payment of light or harbour or other dues, or to any other similar requirement or condition or exaction?

Question 4. Under the provision of the said Article that the American fishermen shall be admitted to enter certain bays or harbours for shelter, repairs, food, or water, and for no other purpose whatever, but that they shall be under restrictions as may be necessary to prevent their taking, drying, or curing fish therein or in any other manner whatever abusing the privileges thereby reserved to them, is it permissible to impose restrictions making the exercise of such privileges conditional upon the payment of light or harbour or other dues, or entering or reporting at custom-houses or any similar conditions?

Question 5. From where must be measured the "three marine miles of any of the coasts, bays, creeks, or harbours" referred to in the said Article?

Question 6. Have the inhabitants of the United States the liberty under the said Article or otherwise to take fish in the bays, harbours, and creeks on that part of the southern coast of Newfoundland which extends from Cape Ray to Rameau Islands, or on the western and northern coasts of Newfoundland from Cape Ray to Quirpon Islands, or on the Magdalen Islands?

Question 7. Are the inhabitants of the United States whose vessels resort to the treaty coasts for the purpose of exercising the liberties referred to in Article I of the Treaty of 1818 entitled to have for those vessels, when duly authorized by the United States in that behalf, the commercial privileges on the treaty coasts accorded by agreement or otherwise to United States trading vessels generally?

After considering the contentions and views of the two nations, which were presented in printed form, and after hearing oral arguments by counsel, the court, on September 7, 1910, rendered a decision upon all the questions. The decision was almost entirely favorable to the United States Government, its contentions being in no instance completely denied, and in most of the questions fully accepted.

On Question 1, which involved the most important issue, the court decided that the right of Great Britain to make regulations, without the consent of the United States, as to the exercise of the liberties granted in the convention of 1818, was inherent in the sovereignty of Great Britain, but that such regulations must be appropriate or necessary for the protection of the fisheries, desirable or necessary on moral grounds, and equitable as between local and American fishermen. In case of a difference of opinion between the two nations as to the reasonableness of existing regulations, it was decided that the difference should be settled by a commission of expert specialists. In regard to future regulations it was recommended that all laws and ordinances be published at least 2 months before becoming effective, and if the United States Government should consider such laws inconsistent with the treaty of 1818, they should not take effect so far as the fishermen of the United States were concerned until approved by a permanent mixed fishery commission, the method of appointment of which was provided for in the decision.

On Question 2, the court held that inhabitants of the United States possessed the right to employ, as members of their fishing crews, persons not inhabitants of the United States, but that such non-inhabitants should derive no benefit or immunity from the treaty.

On Question 3, the decision was that the regulation requiring American fishing-vessels to report to custom-houses was not unreasonable, unless there was a lack of convenient opportunity to report either in person or by telegraph, but that American fishing-vessels should not be subjected to the purely commercial formalities of reporting and clearing, nor be compelled to pay light or harbor dues not imposed upon Canadian fishermen.

The decision on Question 4 was along the same lines, the court holding that to impose restrictions making the exercise of the privileges granted in Article I of the convention of 1818 conditional upon the payment of light and harbor dues, or entering and reporting at custom-houses, would be inconsistent. However, American fishing-vessels had no right to abuse the privileges which they held, and, if remaining longer than 48 hours in a port which they had entered for any of the four purposes mentioned in the treaty, should be required, if thought necessary by the British or colonial government, to report to a custom-house or a customs official.

Question 5 had to do with the "headlands doctrine," which had caused the first difference over the meaning of the treaty of 1818, and was one of the most important questions coming before the tribunal. The decision on this question was that "in case of bays, the three marine miles are to be measured from a straight line drawn across the body of water where it ceases to have the configuration and characteristics of a bay. At all other places the three marine miles are to be measured following the sinuosities of the coast." In order to render the decision more practicable the tribunal specifically defined the limits of exclusion for a number of bays "where the configuration of the coast and the local climatic conditions are such that foreign fishermen, when within the geographic headlands, might reasonably and bona fide believe themselves on the high seas," and recommended that for all other bays "the limits of exclusion shall be drawn three miles seaward from a straight line across the bay in the part nearest the entrance at the first point where the width does not exceed ten miles."

Question 6 involved a quibble injected into the controversy at a late date at the suggestion of the Newfoundland Government. It represented an attempt to place an entirely new construction on the treaty of 1818. The treaty stated that the inhabitants of the United States should have the "liberty to take fish on that part of the southern *coast* of Newfoundland which extends from Cape Ray to the Rameau Islands, on the Western and Northern *coast* of Newfoundland from the said

Cape Ray to the Quirpon Islands, and also on the *Coasts, Bays, Harbours, and Creeks* from Mount Joly on the Southern Coast of Labrador to and through the Straits of Belleisle, and thence northward indefinitely along the Coast." The Newfoundland Government claimed that the omission of the words "bays, harbors and creeks," in connection with the coasts of Newfoundland and the Magdalen Islands and their use in connection with the coast of Labrador indicated that the American fishermen had no right to fish in the bays, creeks, and harbors of Newfoundland and the Magdalen Islands. Since the American fishermen had always exercised this liberty, the United States Government would have been subjected, in case of a decision favorable to the contention of Newfoundland, to a claim for very large damages for the value of all the fish taken by the United States fishermen in the Newfoundland bays for 90 years. Moreover, in event of such a decision, the United States fishermen would have been excluded from the most valuable and important fisheries of the Newfoundland coast—the bait-fish and the winter-herring fisheries—both of which are carried on wholly within the bays, and Newfoundland would have been in a position, by threatening the entire American cod-fishing industry, to compel the free entry of Newfoundland fish and fish products into the United States. The tribunal was of the opinion, however, that the word "coasts" did not exclude bays, creeks, and harbors, and decided that the United States fishermen were entitled to fish along the entire coast-line of the treaty coasts.

The decision on Question 7, which involved the issue of commercial privileges of the United States fishing-vessels, was also favorable to the United States, the tribunal holding that as far as concerned the treaty there was nothing in its provisions to prevent the United States fishing-vessels from exercising, when duly authorized by their government, the commercial privileges accorded to trading-vessels generally, providing that the treaty liberty of fishing and the commercial privileges were not exercised concurrently.

Thus the important controversy over the meaning of Article I of the convention of 1818 was at length definitely settled, and the misunderstanding, which for nearly a century had been a source of embarrassment to the governments of both the United States and Great Britain, was terminated. That two great nations were able to settle a disagreement in which the issues at stake were of such importance by the method of arbitration was of signal benefit not only to the nations themselves, but also to the world at large in that it afforded a noteworthy example of how international difficulties could be justly and honorably settled in a peaceable manner. To the Hague Tribunal the case gave an added degree of prestige which seemed certain to increase its capacity for future usefulness.

CONTROVERSY OVER THE FUR-SEAL FISHERIES.

The other important international fisheries controversy—that growing out of the attempt of the United States to prevent the destruction of the fur-seal fisheries of Bering Sea by pelagic sealers—had its origin in 1886, when three Canadian sealing-vessels were seized by a United States revenue-cutter, about 60 miles from the nearest land, and later condemned in the Federal court at Sitka for having been “found engaged in killing fur-seals within the limits of Alaska Territory and in the waters thereof in violation of section 1956 of the Revised Statutes of the United States.”¹ In the trial of the vessels the court took the position that the United States, at the time of the purchase of Alaska, had acquired full territorial jurisdiction over the Bering Sea east of the one hundred and ninety-third degree of west longitude, and directed the jury to consider that part of the sea as being comprised within the territorial waters of Alaska. The British Government, taking exception to the claim that the United States possessed sovereignty over the Bering Sea beyond the ordinary three-mile limit, protested against the arrest of the Canadian sealers. At the order of President Cleveland, the vessels were released, without, however, any disavowal of the position assumed by the court in its charge to the jury.

In 1887, Mr. Bayard, the Secretary of State of the United States, made an attempt to induce the various countries having interests in the fur-seal fisheries of Bering Sea to enter into a cooperative agreement for the protection of the seals, but because of the opposition of Canada, without whose assent Great Britain could not act, his effort resulted in failure.² The depredations of the pelagic sealers continuing to increase, the United States Government renewed its efforts to protect the seal herd, and in 1889 again seized several Canadian vessels engaged in sealing in Bering Sea outside of the three-mile limit.³ This time, without raising the question of territorial jurisdiction over Bering Sea, the Government of the United States defended the seizures by contending that the vessels taken were engaged in a pursuit that was in itself *contra bonos mores*, and, moreover, asserted that the seals of Pribilof Islands were the property of the United States, the ownership resulting from the possession of the islands and coasts upon which the seals were accustomed to breed and live. To the novel claim of ownership Great Britain naturally protested, and at the same time declared that the United States, unless authorized by an international convention, had no right to maintain police regulations of any sort on Bering Sea.

In the diplomatic controversy which ensued, though placing greatest reliance and emphasis upon the claim of a right to protect a property interest in the fur-seals, the United States Government did not entirely abandon the contention as to territorial jurisdiction over the waters of

¹Fur Seal Arbitration *Proceedings*, II, 82, Appendix, 115.

²*Ibid.*, II, 83.

³*Ibid.*, II, Appendix, 168 *et seq.*

Bering Sea. Though specifically disclaiming any intention of demanding that the sea be considered a *mare clausum*, Secretary of State Blaine asserted that the United States possessed sufficient authority for exercising the jurisdiction necessary for the protection of the seal herd. The Russian Government had assumed jurisdiction over Bering Sea in 1821, when Czar Alexander issued an ukase, in which he granted exclusively to his subjects the rights to trade and fish on all islands, ports, and gulfs, including the whole northwest coast of America, north of the fifty-first parallel of north latitude, and forbade all foreign vessels to land on these coasts and islands or even to approach them within a distance of 100 miles. Against the pretensions contained in this edict, the governments of both the United States and Great Britain entered protests, and, as a result, each nation, the United States in 1824 and Great Britain in 1825, secured a treaty in which Russia abandoned the claim to exclusive jurisdiction and agreed that in any part of the Pacific Ocean the citizens and subjects of the United States and Great Britain should not be disturbed in navigation, fishing, or trading with the natives at points along the coast not occupied by Russia. In the fur-seal controversy with Great Britain, the United States Government contended that in the renunciation of the claim to sovereignty over the Pacific Ocean, Russia had not given up jurisdiction over the fur-seal fisheries of Bering Sea, the latter body of water not being included in the phrase *Pacific Ocean*, as used in the treaties of 1824 and 1825. Consequently, when Russia ceded Alaska to the United States in 1867, jurisdiction over the fur-seal fisheries, which it was contended Russia had exercised continuously and without opposition after 1799, was transferred to the United States.

As the controversy developed the diplomatic interchanges resulted, in June 1891, in a temporary understanding by which Great Britain undertook to prohibit, until the following May, the killing of fur-seals by British subjects in that part of Bering Sea east of the line of demarcation described in the treaty of 1867 between the United States and Russia; and the United States Government agreed to limit the killing of seals by citizens of the United States to a number necessary for the maintenance of the natives of the Pribilof Islands. Early in 1892 both countries agreed to arbitrate the entire dispute, and pending the decision of an arbitration tribunal, the *modus vivendi* of 1891, with a few modifications, was continued.

The arbitration court, consisting of seven distinguished jurists, met in Paris in 1893. Five points involving the question of the jurisdiction of the United States over the fur seals in Bering Sea were submitted to the tribunal, and a provision was made that, in case the decision on the five questions was adverse to the contentions of the United States, the tribunal should prescribe concurrent regulations for the protection of the seals outside the jurisdictional limits of both the United States and

Great Britain. The five points relating to the jurisdiction of the United States were as follows:¹

1. What exclusive jurisdiction in the sea now known as the Bering's Sea, and what exclusive rights in the seal fisheries therein, did Russia assert and exercise prior and up to the time of the cession of Alaska to the United States?
2. How far were these claims of jurisdiction as to the seal fisheries recognized and conceded by Great Britain?
3. Was the body of water now known as the Bering's Sea included in the phrase *Pacific Ocean*, as used in the treaty of 1825 between Great Britain and Russia; and what rights, if any, in the Bering's Sea were held and exclusively exercised by Russia after said treaty?
4. Did not all the rights of Russia as to jurisdiction and as to the seal fisheries in Bering's Sea east of the water boundary, in the Treaty between the United States and Russia of the 30th of March, 1867, pass unimpaired to the United States under that Treaty?
5. Has the United States any right, and if so, what right of protection or property in the fur-seals frequenting the islands of the United States in Bering Sea when such seals are found outside the ordinary three-mile limit?

The award of the arbitrators was throughout adverse to the contentions of the United States Government.² The court decided that Russia had never exercised an exclusive jurisdiction in Bering Sea or any exclusive rights in the seal fisheries beyond the ordinary limit of territorial waters, and that the United States possessed no right of protection or property in the fur seals frequenting Bering Sea, when the seals were found outside of the three-mile limit. As provided for in event of a decision of this nature, the arbitrators established a system of regulations for the protection of the seals outside territorial limits, to be enforced jointly by the two nations against the citizens and subjects of either. By these regulations pelagic sealing was to be suspended during May, June, and July throughout Bering Sea, and to be suspended permanently within a zone of 60 geographical miles around the Pribilof Islands. Only licensed vessels were to be allowed to engage in sealing, and the use of nets, firearms, and explosives in taking seals in Bering Sea was forbidden.

Both Great Britain and the United States enacted laws providing for the execution of these concurrent regulations, and the United States Government enacted a statute prohibiting its citizens from engaging in pelagic sealing in Bering Sea at any time. Notwithstanding these regulations, however, the fur-seal herd continued to dwindle. It was found that the closed zone of 60 miles did not afford adequate protection even from Canadian sealers, because the female seals having young dependent upon them fed outside of the protected area, and furthermore, Japanese sealers, many of whom sailed Canadian vessels transferred to the Japanese flag, not being bound by the regulations established by the arbitration tribunal, killed thousands of seals just outside the three-mile limit of the Pribilof Islands. So rapidly did the seal herd decline, that in 1896 the governments of Great Britain and

¹Fur Seal Arbitration *Proceedings*, I, 76.

²*Ibid.*, I, 75-80.

the United States appointed a joint commission to study the fur-seal life of Bering Sea, endeavor to find out the exact cause of the decrease of the number of seals, and suggest some method for greater protection. The conclusion of the commission was that the decimation of the herd was due almost solely to the killing of female seals at sea, and that the preservation of the seal fishery could be accomplished only by the abolition of pelagic sealing.

Notwithstanding the report of the commission, nothing was done for several years to secure more effective protection of the seals, and the herd gradually came nearer and nearer to the point of total extinction.

Finally in May 1911, an international conference of representatives from the United States, Great Britain, Russia, and Japan, the four nations having sealing interests in the north Pacific Ocean, met at Washington for the purpose of effecting an agreement by which the fur-seal fishery could be preserved. After deliberations lasting almost two months, the members of the conference signed a treaty under the terms of which the four powers agreed to prohibit their citizens or subjects from engaging for a period of 15 years in pelagic sealing in the waters of the Pacific Ocean north of the thirtieth parallel of north latitude, including the seas of Bering, Kamchatka, Okhotsk, and Japan.¹ As a compensation for the losses of the pelagic sealing interests, the United States agreed to give to Great Britain and Japan each 15 per cent of the seal skins taken yearly on the Pribilof Islands; Russia made similar provisions with regard to the seals killed on the Commander Islands; and Japan agreed to give to each of the other nations 10 per cent of the seal skins obtained on Robben Reef and the Kuril Islands. The treaty also provided that the United States should pay Great Britain and Japan each \$200,000, to be credited in lieu of seal skins due, and that if no seals were taken on the Pribilof Islands in any year in which the herd numbered 100,000 or more, the United States should make a payment of \$10,000 to each of these two nations. The treaty was ratified by the Senate on July 24, 1911, and became effective December 15, 1911. Under the terms of the first article, every person and vessel engaging in pelagic sealing within the interdicted area may be seized, except in territorial waters, by the naval vessels of any one of the four powers, but must be delivered to the officials of their own nation, which shall have jurisdiction to try the offense.

With the coming into effect of this convention, pelagic sealing in the North Pacific Ocean was terminated, and for a time at least the problem of the preservation of the seal herd has been solved. As a further measure of protection, the United States Congress, in passing the act to give effect to the treaty, included a provision for the establishment of a five-year closed season on the Pribilof Islands, limiting the killing of seals there to a number sufficient for food for the natives. The good effects of the protection now accorded the seal herd have been described in a previous chapter.

¹Charles, *Treaties, Conventions, etc., between the United States and other Powers*, 84.

PART THREE

**GOVERNMENT AID AND COM-
MERCIAL POLICY**

By D. S. HANCHETT

CHAPTER XXXVII.

THE MACHINERY OF FEDERAL REGULATION OF COMMERCE.

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From the earliest days of its history the United States Government has been active in the control and regulation of commerce. Before the outbreak of the Revolutionary War the American colonists were accustomed to the regulation of commercial matters by the British Government, and it is not surprising that, when independence was declared, the Continental Congress should have proceeded to regulate trade matters. While it possessed no authority to do so, its action was nevertheless respected by the several States during the revolutionary crisis. As early as 1775 the Continental Congress opened American ports to the ships of all countries, prohibited the slave trade, and assumed the management of the post-office. The first treaty of commerce (with France) providing for reciprocal trade was negotiated along with the treaty of alliance in 1778. But these *de facto* powers did not become *de jure* at once. The colonists had not entirely learned the lesson of cooperation. The Articles of Confederation, adopted by Congress in 1777, and ratified by all of the States by 1781, gave Congress no power to make commercial regulations.

The various State governments not only placed varying restrictions upon foreign trade, but often imposed burdensome duties on interstate traffic as well, and retaliation—commercial war in fact—was the result. Effective regulation of trade under the Articles of Confederation was impossible, and furthermore, individual States obstinately prevented the adoption of several amendments to the Articles which were then brought forward with a view to conferring upon Congress a certain degree of regulative power.

The unfortunate commercial situation was the chief reason for the change in the form of government effected by the adoption of the Federal Constitution in 1789. Of the various powers conferred by that instrument on the Federal authorities none were more important than

those relating to the control of domestic and foreign trade, and to the various institutions with which the operations of commerce are closely related. Among all the influences which contributed to the economic prosperity of the Republic during the early years of its existence, none was more potent than the system of commercial regulation, the adoption of which was made possible by the Constitution.

The commerce clause, Article I, section 8, of the Constitution, provides that "the Congress shall have Power . . . to regulate Commerce with foreign Nations, and among the several States and with the Indian Tribes." Additional clauses of the same article and section grant to Congress the power "to lay and collect taxes, duties, imposts and excises, to pay the debts and provide for the common defense and general welfare of the United States; but all duties, imposts and excises shall be uniform throughout the United States;" and "to make all laws which shall be necessary and proper for carrying into execution the foregoing powers, and all other powers vested by this Constitution in the Government of the United States, or in any department, or officer thereof." The power thus conferred has from time to time been broadly construed by the Supreme Court, and as a consequence the activities of the Federal Government in the regulation of foreign and domestic trade have constantly increased.

Commerce has so many phases and touches so many sides of national life, that it would be impossible to place under a single officer or even in a single department all the governmental functions relating to it. Each of the three great branches of the Federal Government, the executive, the legislative, and the judicial, has a part in the regulation of trade. The President and the various executive departments immediately under him, the Federal Congress, with its permanent and special committees, and the Federal courts, from the beginning, had commercial functions to perform, and with the rapid increase in the volume and complexity of the trade of the nation and with the steady growth of Federal control, the machinery for the regulation of commerce became more elaborate and complex. In 1903 it was found advisable by Congress to create a new executive department, the Department of Commerce and Labor, under the jurisdiction of which was placed a large number of bureaus, boards, offices, and services which had formerly been attached to other executive departments. In 1913 this policy of segregation of work in department matters relating to commerce was further carried out by creating a Department of Labor separate from the Department of Commerce. It must not be supposed, however, that all of the governmental services which relate to this field have been placed under the Secretary of Commerce. All of the executive departments, as well as Congress and certain Federal courts, exercise commercial functions, and there is a large number of subordinate bureaus and offices which have a part in the work of aiding and regu-

lating the interstate and foreign trade of the nation. It is the purpose of this chapter to give briefly the history of the administrative regulation of commerce by the various divisions of the Federal Governmental machinery.¹

POWERS OF THE PRESIDENT REGARDING COMMERCE.

At the head of the executive branch of the government stands the President of the United States. His influence upon commerce is exerted in numerous ways, his appointing power being first in importance. Upon the character of the men whom he selects for such offices as Secretary of Commerce or Interstate Commerce Commissioner depends in large measure the efficiency of governmental control of commerce. While, indeed, appointments are made "by and with the advice and consent of the Senate," in practice the President is but little restricted by the Senate in naming men to fill cabinet positions. Furthermore, by virtue of his power of removal, of the broad powers of direction which he exercises over the work of the executive departments, and by means of his ordinance power, the President exerts great authority over the machinery of regulation. A recent example of the exercise of the ordinance power will serve to illustrate its importance. On November 13, 1912, President Taft by proclamation established the tolls which are to be levied on ships passing through the Panama Canal, and on November 21, 1913, President Wilson fixed the rules for determining the tonnage upon which vessels shall pay the tolls that are levied, thereby affecting the commerce, not only of the United States, but of the world, to the extent of determining the conditions under which the Panama Canal may be used.

Another and very specific way by which the power of the President is exercised over commerce is through his special authority over foreign relations. The Secretary of State gives to diplomatic relations his special attention, but upon the President personally depends in large measure the success of negotiations with other powers as regards commercial privileges, and the rights of aliens in trade with and in the United States.²

While the treaty-making power is exercised by the President, by and with the advice and consent of the Senate, he is obliged to respect the power of Congress over commerce, and must observe in commercial treaties the policies established by the laws of Congress. Conflicts have arisen with respect to the power of the President and Congress in relation to commercial treaties, but the Supreme Court has declared³

¹It will be noticed that much of the language used in this part of this volume is in the present tense. In giving a history of the agencies of government for the regulation of commerce it seems advisable, and, indeed, almost necessary, to state what the commercial functions of the several departments and bureaus now are and to state when and how those powers and duties concerning commerce were conferred upon the existing agencies of the government. "Present" conditions are those of 1913.

²Fairlie, *The National Administration of the U. S., of America*, 29.

³*United States vs. Lee Yen Tai*, 185 U. S. 213.

that "as Congress may by statute abrogate, so far at least as this country is concerned, a treaty previously made by the United States with another nation, so the United States may by treaty supersede a prior act of Congress on the same subject." The act or treaty which bears the most recent date is controlling, and the President may therefore, in effect, if he can secure the consent of the Senate, supersede Congressional action by the negotiation of commercial (or other) treaties.

The President, acting through the State Department, prepares the formal draft of a treaty and then seeks the "advice and consent," that is the ratification, of the Senate. The difficulty of securing the approval of two-thirds of the Senators present has sometimes required the negotiation of a new treaty or the acceptance by the countries parties to the treaty of amendments proposed by the Senate as conditions precedent to favorable action. The Senate's rejection of, or failure to accept, a treaty has given rise to some of the "executive agreements" which the President has made with foreign countries. President Roosevelt's agreement with Santo Domingo in 1905, whereby the supervision of Dominican finances was undertaken by American citizens, arrangements were made for paying the foreign debt, and American battleships were sent to the island, followed the refusal by the Senate to ratify a treaty the chief terms of which were those embodied in the executive agreement.

The use by the President of his military powers to keep open the channels of interstate commerce during strikes and riots makes him the ultimate authority to whom appeal must be made in times of crisis to keep the machinery of commerce going. The President is, in fact, the supreme director, while the ten great administrative departments, at the head of each of which is a Cabinet officer of his selection, comprise in large part the mechanism through which he acts.

COMMERCIAL FUNCTIONS OF THE DEPARTMENT OF STATE.

Logically, it might seem better to consider the commercial functions of the ten departments by beginning with the Department of Commerce, to which is now intrusted the fulfillment of most of the functions under consideration. In order, however, to show more effectively the historical growth of the administrative bodies dealing with commerce, the departments will be considered chronologically.¹

The Department of Foreign Affairs was created by Congress July 27, 1789, and on September 15 following the present title was adopted. The department was the successor of the Department of Foreign Affairs, created in 1781 to handle matters which had, since 1775, been delegated to committees of Congress.² The early functions of the

¹*History of the Department of State of the United States*, 1901, 14.

²*Checklist of United States Public Documents, 1789-1909*, p. 891.

State Department were more comprehensive than they are now. The Secretary of State was originally at the head of the Patent Office, and his department had control of the census, and although both of these offices, which bear important relations to commerce, have been transferred to other departments, the State Department still exercises commercial functions of great importance. Foreign relations, the supervision of which was the primary purpose for which this oldest one of the executive departments was organized, have always been handled by it through the diplomatic service, which, in 1913, included 157 officers who represented the United States in 48 countries. The Secretary of State and the diplomatic representatives abroad have large commercial responsibilities, for it is through them that commercial treaties are negotiated and the rights existing by virtue of those treaties are enforced. The general functions of the service were stated as follows by Frederick T. Frelinghuysen, Secretary of State under President Arthur:

"The diplomatic officer does for the nation what the consular officer does for the citizen. Speaking generally, the consul aids the individual and protects separate interests, while the minister acts for the nation and guards its general political and commercial welfare."¹

With the details of commercial affairs the diplomat is not usually concerned, but one of his chief duties is to cooperate with consular officers in promoting American commerce, agriculture, and manufactures. The consular service is fully considered in the following chapter. The Bureau of Citizenship supplements the work of the foreign service by issuing passports, examining certificates of the registration of American citizens in consulates, authenticating documents for use abroad, and furnishing to citizens letters of introduction to members of the foreign service. Lists of American diplomatic and consular officers are furnished to interested parties by the Bureau of Appointments.²

THE DEPARTMENT OF WAR.

The second of the executive departments was established August 7, 1789, eleven days after the creation of the Department of Foreign Affairs. Its chief commercial function is the improvement of rivers and harbors, and the magnitude of its operations in this work will appear in the consideration of that subject in Chapter XL.

The War Department and the Secretary of War, acting through the Bureau of Insular Affairs and the Corps of Engineers, have important duties in the outlying territories of the United States. The Canal Zone in Panama was administered by the Secretary of War, through the Isthmian Canal Commission, from 1904 to 1914, when it was placed

¹Exec. Doc. No. 146, 48 Cong., 1 sess., p. 1.

²Congressional Directory, 63 Cong., 3 sess., 292.

under the governor of the Panama Canal, who is subordinate to the Secretary of War. To the Bureau of Insular Affairs, established in 1898 as a "division" and made a bureau in 1902, under the immediate control of the Secretary, is assigned all matters pertaining to insular civil government. Among the commercial functions of the bureau is the gathering and publication quarterly of statistics of insular exports and imports, shipping, and immigration. Porto Rico was granted civil government by the act of April 12, 1900, and until June 30, 1908, its governor, who is appointed by the President of the United States, was required to report to the State Department. Thereafter jurisdiction was vested in the War Department. Various measures of commercial assistance, including the improvement of San Juan harbor, have been prosecuted by the United States. Civil government was established in the Philippines by the act of July 1, 1902, and the islands are governed by a commission which was organized in 1904 and is subject to the Secretary of War.

THE DEPARTMENT OF THE TREASURY.

The Treasury Department is vitally concerned with commerce, which it aids and regulates through five different agencies—the Customs Service, the Revenue Cutter Service, the Commissioner of Internal Revenue, the Life-Saving Service, and the Bureau of Public Health.

In the constitutional convention, upon the initiative of Gouverneur Morris, an effort was made to designate the chief officer of the department as the "Secretary of Commerce and Finance."¹ Although this was not the title adopted, the Treasury Department nevertheless had, from the beginning, a very considerable supervision over commerce, and before the establishment of the Department of Commerce and Labor, in 1903, it was the most intimately concerned with commerce of all of the executive departments. Its former primacy in this respect is apparent when it is remembered that, in addition to the services which it still performs, the department in 1903 also included the Lighthouse Board, the Coast and Geodetic Survey, the Steamboat-Inspection Service, the Bureau of Navigation, the Bureau of Immigration, the Bureau of Statistics, and the Bureau of Standards. All of these bureaus and services were then transferred to the new Department of Commerce and Labor, but the Treasury Department nevertheless retained many important duties respecting the regulation of commerce.

Important commercial functions are exercised by the Customs Service, which, as one of the first necessities of government, was established by the act of September 2, 1789, in the Treasury Department, where it has remained. From 1849 to 1894 there was a Commissioner of Customs, whose functions were rather those of an auditor than of an administrative officer, and whose office was discontinued when

¹*Organization and Law of the Department of Commerce and Labor*, 8.

the auditing service was reorganized. The general supervision of the service and of the Division of Customs, which was organized about 1870 to attend to administrative duties, is vested in the Assistant Secretary of the Treasury in charge of customs. An organization grew up which, in course of time, embraced a superabundance of offices and officers whose salaries were not adjusted to the demands made upon them. Finally, pursuant to the act of August 24, 1912, a reorganization was effected, designed to accommodate the machinery of collection to altered trade conditions. The 126 collection districts previously in existence were reduced in number to 49, and the designations "sub-port of entry" and "port of delivery" were abolished, "port of entry" being the only classification retained. A collector of customs has general supervision of each district, and a collector of the port has charge of each port.

The functions of the service pertain to the entry of ships from foreign ports, the levying of customs duties following an appraisal of imported goods, the hearing of appeals respecting appraisals, the departure of ships from port, and the enforcement of various navigation laws. Permission to discharge cargo is given to the master only after a sworn copy of the ship's manifest has been filed with the port collector, together with the clearance papers and register or a consul's receipt therefor. The tonnage tax, levied on all ships arriving from foreign ports, is then collected. A customs officer supervises the process of unloading. Consignees enter goods at the custom-house by presenting sworn invoices from the consignor or owner, and the goods are, moreover, appraised by examiners, appraisers, and assistant appraisers, and at the smaller ports by collectors themselves. In practice most of the work is done by individual examiners, upon whose knowledge and judgment depends the accuracy of the appraisal, inasmuch as the appraisers themselves are unable, at the more important ports, to review effectively the work of their subordinates.

Although admittedly inadequate, this appraisal assists in the detection of frauds. Appeal from it lies to the Board of General Appraisers, appointed by the President, which was a branch of the Treasury Department until 1909, since when it has been quasi-independent. The headquarters of the board are in New York, where two-thirds of the work is done. It serves as a reviewing board, with some functions analogous to those of a court. Appeal from its decisions lies to the United States Court of Customs Appeals.

When the appraisal has been completed, the customs duties are levied. Since the institution in 1846 of bonded warehouses, it has no longer been necessary to collect duties or to insure their collection before goods are landed, but the importer may, if he chooses, store the goods in a Government warehouse or in a private warehouse supervised by customs officers. After the outgoing cargo has been loaded and the

ship is ready to depart, its register is obtained, and a bill of health, certifying to the health conditions of the port, together with clearance papers, are secured from the collector. A ship from abroad is thus kept under the supervision of the customs service during the entire length of its stay in port. From the records of arrivals and clearances, and from the copies of ships' manifests filed with him, the collector compiles foreign trade and tonnage statistics which are published by a bureau in the Department of Commerce.

Customs officers also document ships flying the American flag; keep records of crew lists of departing ships; receive passenger lists of arriving ships; record bills of sale and mortgages of vessels; enforce the steamboat-inspection laws; and, where there is no shipping commissioner, carry out his duties with respect to the shipping of seamen.

In the collection of import duties the Customs Service is assisted by the Secret Service and the Revenue Cutter Service, which are likewise organized under the Treasury Department. The Secret Service, which was established in 1861, in the State Department, was transferred in 1865 to the Treasury Department, of which it has since been a division. Its work was formerly confined chiefly to the prevention of counterfeiting, but in 1911-12 its duties were increased, and it now cooperates with the Division of Special Agents maintained by the Treasury Department for the purpose of detecting customs frauds.

The Revenue Cutter Service, established in 1790, was known as the Revenue Marine Service until 1894. It is organized as a division in the Treasury Department, and does for the Customs Service on the sea what the Secret Service does for it on land. The officers of its revenue-cutters board inbound vessels from foreign ports, examine their papers, and indorse the manifests covering their cargoes. Besides aiding generally in the enforcement of the revenue laws, the service exercises many other functions. It cooperates with the Department of Commerce in enforcing the navigation and motor-boat laws, requires strict observance of the laws governing the anchorage and movement of vessels in port, enforces the quarantine and immigration laws, and suppresses mutiny aboard merchant vessels. The major part of the actual work of the service is of an emergency nature. It is called upon to assist vessels in distress, to remove derelicts from the ocean, and to save lives at sea. Its officers aid the life-saving corps by instructing, drilling, and inspecting crews and constructing stations. The wireless equipment of the revenue-cutters enables them to assist in the protection of life and property at sea.

Existing arrangements for the collection of internal revenue date from 1862, when the Civil War necessitated the reestablishment of taxes of this nature, which had not been collected at all since 1848. The Commissioner of Internal Revenue, who is at the head of the bureau of the same designation, superintends the enforcement of the

internal-revenue laws and the collection of the taxes. Inasmuch as the collection of these taxes ordinarily requires very little work, the chief duties of the internal-revenue forces are those of inspection. Until 1909 the activities of the bureau were confined to taxes levied on certain specified documents and articles of commerce. The special excise tax on corporations, authorized by Congress in that year, extended the field of operations materially, and the duties of the bureau were further increased and its collections vastly augmented in 1913, when the collection of the income tax, authorized by amendment of the Constitution, was made a duty of the bureau.

Life-saving stations were first established by the Federal Government in 1874, under the direction of the Revenue Marine Service, which had, however, previously been carrying on for a long time the work of life-saving at sea. In 1878, the Life-Saving Service was separately organized as a division in the Treasury Department, where it still remains, under the supervision of a general superintendent. The keepers and surfmen at the 284 stations maintained by the service keep a strict watch, patrol the coasts at night, warn ships of impending danger, rescue lives, and save property threatened with loss at sea. Valuable statistical reports are compiled showing marine casualties, not only within the field of operations of the service, but throughout the entire world. Miscellaneous minor services, such as the recovery of missing buoys and the relighting of extinguished beacons, are rendered.

Great modifications in the equipment of the service have made its work more effective. In 1912 there were in use 109 power life-boats and surf-boats, which not only increased the efficiency but extended the scope of the service. More disasters were brought within reach and many more rescues were reported than in the years prior to 1908, when power-boats were little used. The service operates nearly 1,500 miles of telephone lines, connecting with public telephones and wireless stations, so that it keeps in close touch with the Weather Bureau and with commercial centers. Facilities are thus provided for displaying promptly storm-warning signals and for furnishing to ship-owners and others information concerning vessels endangered by storms along the coast. In the 1,730 disasters reported to have occurred within the limits of operations in 1912, only 59 vessels were lost. The property saved, including vessels and cargoes, was valued at \$11,155,170.

National supervision of health matters is exercised through the Treasury Department, under the control of which the Marine Hospital of the United States was established in 1798. The purpose then aimed to be subserved was merely the provision of medical attention for sick and disabled seamen in the merchant marine. However, considerations of expediency caused a constantly growing emphasis to be placed on matters relating to the public health, and many new functions

were from time to time intrusted to the service. In 1902 the designation "Public Health and Marine Hospital Service" was adopted, and finally, in 1912, the designation "Bureau of Public Health" was applied and an organization effected designed to deal with the health of the nation in its broadest sense. The past and present services rendered by this branch of the department are best treated by a consideration of the work of its various divisions.

The Division of Marine Hospitals and Relief maintains 146 establishments, where medical care is given to the officers and crews of American vessels, as well as to government employes in various marine services, and conducts examinations for the detection of color-blindness in ship's officers. The work of this division embodies the earliest functions of the service.

Through the Division of Foreign and Insular Quarantine and Immigration, a service of ever-increasing importance is rendered. Although quarantine matters were originally left to the States, as early as 1796 and 1799 Federal legislation directed certain officials, such as port collectors and revenue-cutter officers, to assist in the execution of State legislation. The cooperation of the consular service was secured at an early date through reports on the existence of disease abroad and on the sailing of vessels bound from infected ports to the United States.

Federal interest in quarantine matters was, however, slight until in the late seventies, when a serious yellow-fever epidemic in the South led to an agitation for a national quarantine system. In 1878 the Secretary of the Treasury was authorized to establish a quarantine at ports where no State or municipal establishments existed. The following year a National Board of Health was established with authority to promulgate national quarantine regulations, which, if State authorities were unwilling to enforce, were to be carried out by Federal officers specially designated for the purpose. Another crisis came in 1893, when an epidemic of Asiatic cholera in European ports, whence emigrants sailed to the United States, led to the establishment of a more effective supervision. The National Board of Health was abolished, and control over quarantine vested in the Marine Hospital Service, and the strict supervision of the surgeon-general has since brought about the conformity of the State regulations with Federal regulations. Annual conferences of State and National health officials assist in securing uniformity of administration. In 1879 the National Board of Health was authorized to build temporary quarantine stations, which were made permanent in 1888. New stations have been authorized from time to time, until the service now maintains a total of 47 in the continental United States and 24 in outlying possessions.

Medical officers are stationed at fourteen American consulates to prevent the introduction into the United States of epidemic diseases. The Division of Foreign and Insular Quarantine and Immigration has

charge of the examination of arriving aliens, and, at the request of the Department of Labor, which supervises immigration, may require quarantine officers stationed at Italian consulates to inspect emigrants departing for the United States. Large immigrant hospitals are maintained at New York and San Francisco.

Interstate commerce is subject to the rules of the Division of Domestic (interstate) Quarantine, which is charged with preventing the spread of contagious or infectious diseases from one State or Territory into another.

THE POST-OFFICE DEPARTMENT.

When temporarily established in 1789, the post-office was considered a part of the Treasury Department, but in 1792 it was permanently established as the General Post Office. Although in 1829 the Postmaster-General was admitted to the Cabinet, it was not until 1872 that the post-office was recognized by Congress as an executive department. Aside from its indispensable function of supplying a prompt and safe mail service, it has secured for commerce greater security with respect to means of transporation than would otherwise have been enjoyed, through the insistence on the prompt movement of trains following the designation by Congress, in 1838, of every railroad in the United States as a post-route. Through the establishment of mail subsidies, which are discussed in Chapter XXXIX, improvements in ocean transportation services have been effected. Moreover, by itself becoming a carrier of parcels, first in 1890 through the international, and, in 1913, through the domestic parcel post, the Post Office Department has facilitated the movement of commerce. Experiments in rural free delivery, begun under the law of 1890, resulted in a rapid extension of this service after 1897. The postal savings system, established in 1911, had, within one and a half years, deposits amounting approximately to \$28,000,000, which, in the opinion of the Postmaster General, represented "hoarded money that is restored to the channels of trade." Post-office money-orders and the registered-mail service are both great commercial conveniences.

THE DEPARTMENT OF JUSTICE.

Although the Attorney General's office was established September 24, 1789, and the Attorney General was from the outset admitted to the Cabinet, the Department of Justice was not recognized as an executive department until 1870. Engaged, as the department is, in aiding the executive and judicial departments of the Federal Government in the enforcement of law, its duties have always extended to all the concerns of national life. Certain of the Department officers are specifically concerned with commercial matters. The solicitor for the Department of Commerce, for instance, acts as legal adviser to the Secretary of

Commerce and the bureau chiefs; the Assistant Attorney General, Customs Division, represents the Government in all cases involving reappraisement and classification of imported goods; the Solicitor of Internal Revenue is the legal adviser of the Commissioner of Internal Revenue, and an Assistant to the Attorney General has special charge of all questions arising under the anti-trust and interstate-commerce laws.

THE DEPARTMENT OF THE NAVY.

Naval affairs were first administered under the jurisdiction of the War Department, but on April 30, 1798, a separate department was created. A brief account of the growth of the Navy is given in Chapter XXXIX. Both in time of war and of peace the Navy and the Marine Corps are constantly called upon to protect American interests in one part of the world or another. The account of the movements of individual warships, contained in the Secretary's annual reports, indicates the wide scope and great utility of this service.¹ Moreover, by placing with American ship-builders orders for war vessels, the department requires the installation of improved equipment at the shipyards and facilitates the development of skilled workmen, whereby American establishments are placed more nearly upon a competitive basis in the construction of ships of all kinds.

The Bureau of Navigation of the Navy Department has charge of the naval wireless equipment, which in 1912 included 41 shore and 6 light-vessel stations. Several naval and military stations were in that year opened for the transmission and receipt of commercial radiograms, and others were made available in the case of a lack of private facilities.

The Hydrographic Office, which was originally established in 1842 as an independent bureau in conjunction with the United States Naval Observatory, has been a part of the Bureau of Navigation since 1866. It is charged with improving the means of safe navigation, both for vessels of the Navy and of the merchant marine, by providing accurate nautical charts, sailing directions, and manuals of instruction. Much of the information contained in its periodical publications is of such importance to mariners that it is "sent broadcast by radio," so that all vessels within reach may get it at once. Monthly charts and weekly bulletins covering the North Atlantic, monthly charts of the North Pacific, and less frequent charts of other oceans are published. These charts locate both fixed and temporary dangers to navigation, indicate the usual paths followed by storms at particular periods, the relative amounts of fog which may be met, the direction and force of prevailing winds, the direction of ocean currents, the variation of the magnetic needle, and the courses to be followed in crossing the ocean. These "steamship lanes" were originally suggested by Lieutenant M. F.

¹*Annual Report Navy Department, 1910*, pp. 57-118.

Maury, of the United States Navy, for routes between northern Europe and the United States, but until 1891 there was no agreement to follow them. In that year five companies, and in 1898 all companies, concerned in trans-Atlantic service agreed to do so. The office has also played an important part in inducing the steamship lines to change their courses during ice seasons in order to avoid danger. Ice reports are sent out over the ocean by wireless, and in 1912, following the *Titanic* disaster, a cruiser was detailed for ice-patrol duty in the North Atlantic. The Secretary of the Navy found it impracticable to detail a vessel for this work in 1913, but the Secretary of the Treasury placed two revenue cutters in this service.

The Naval Observatory, which grew out of the Department of Charts and Instruments, established in 1830, is separately organized, although its connection with the Hydrographic Office is so close that their consolidation has been urged. The Observatory publishes the *American Ephemeris and Nautical Almanac*, containing astronomical information for the guidance of vessels; determines the relative merits of navigation instruments, and establishes standard time and differences of longitude.

THE DEPARTMENT OF THE INTERIOR.

The Department of the Interior, which was created in 1849 to relieve other executive branches of the administration of burdensome affairs not closely related to their normal functions, and to provide means for the exercise of those neglected functions which relate more particularly to the arts of peace, has little direct connection with commerce. The inconsequential commerce with the Indians, which under the Constitution is to be regulated by the Federal Government, is supervised by the Indian Service. With the development of the railway service the department has been concerned, through the Commissioner of the General Land Office, who determines whether railroads have complied with the requirements of Congressional grants. From 1878 to 1904, an officer, first known as Auditor of Railroad Accounts, and later as Commissioner of Railroads, reported on the physical and financial conditions of companies receiving Government aid in lands or bonds, enforced the laws relating to such companies, examined their books, aided the Government directors appointed to their boards, and furnished information concerning their tariffs and accounts. His duties were transferred, in 1904, to the Lands and Railroads Division, and in 1907 to the General Land Office. The Interstate Commerce Commission was, for two years following its creation in 1887, required to submit an annual report to the Secretary of the Interior, who provided quarters for it, and passed upon its accounts and the appointment of its employees. At his own request the Secretary was relieved of these supervisory powers.

The rather nominal authority which the Secretary of the Interior possesses over the Territories, Alaska and Hawaii, affords him an opportunity to exercise an influence over their commerce. His authority consists largely in the receipt of reports from the governors and in the making of recommendations for legislation.

THE DEPARTMENT OF AGRICULTURE.

The Department of Agriculture was established in 1889 as the natural outgrowth of the agricultural activities of the Government, which began in 1836 with the distribution of seeds and plants by the Commissioner of Patents, and, in 1862, developed into a so-called "Department of Agriculture," which was in reality a detached bureau with a commissioner in charge.

Important commercial functions are exercised by one of its subdivisions, the Weather Bureau, which was established in 1890. Before that year, however, a part of the work now done by this bureau was accomplished by other agencies. As early as 1863 the Department of Agriculture published meteorological data compiled by the Smithsonian Institution, and upon the recommendation of the department's commissioner regular weather reports were inaugurated in 1870, when the Chief Signal Officer of the Army was authorized to give storm-warnings and to take meteorological observations. Since the organization of the Weather Bureau its duties have increased until they have attained a surprising variety, and its operations have extended into all parts of the world. Concisely stated, the activities of the Weather Bureau are these: It forecasts the weather; issues and displays its forecasts, together with storm, cold-wave, frost, and flood warnings; gages and reports the height of water in rivers; transmits marine intelligence over its telephone and telegraph lines and otherwise; reports actual temperature and rainfall conditions; conducts investigations in climatology and evaporation and makes and distributes meteorological observations. The weekly forecasts issued at Washington for the weather for a week in advance are prepared on the basis of regular cable and wireless reports from all over the northern hemisphere. Warnings of approaching storms were, in 1912, received from vessels sailing along the various coasts, and from eight special observing stations maintained in the West Indies during the hurricane season. The bureau has arranged with the various wireless services for disseminating broadcast over the oceans and the Gulf both forecast messages and storm-warnings. Through its display stations, the bureau reaches every port and harbor of any considerable importance on the Great Lakes and the seacoasts. The regular stations at eight strategic points maintain a vessel-reporting service, whereby information regarding passing vessels, wrecks, and marine disasters is promptly communicated to interested parties. The weather observers at all marine stations

report vessels in distress and send out calls for help which bring assistance. The Bureau publishes frequent meteorological charts of the oceans and Great Lakes.¹

THE DEPARTMENT OF COMMERCE.

After a statement has been made of the commercial activities of the eight departments of the Federal Government first established, the question might be asked, what important functions remain to be subserved by a Department of Commerce? Congressman Mann, of Illinois, speaking for the House Committee on Interstate and Foreign Commerce, answered the question in the course of the debate preceding the establishment, in 1903, of the Department of Commerce and Labor. He pointed out that, following the creation of the necessary administrative departments in the early period of United States history, Congress was conservative about establishing new departments, whose heads would be entitled to seats in the President's Cabinet, the efficiency of which would be destroyed if its size were unduly increased. Mr. Mann said:²

"It is evident that not more than one new Department of the Government is likely to be created at this time in view of our past policy, but it has seemed to your committee that the enormous interests in our country not engaged in agriculture but now engaged in trade and transportation, in manufacturing and mechanical pursuits, might well have gathered together into one new executive department of the Government those branches of the public service clearly related to their interests, and which could easily be detached from the Departments in which they now are."

Some of the Departments in existence prior to February 14, 1903, when considerations such as those stated above resulted in the passage of the act establishing the Department of Commerce and Labor, were then much more concerned with the development and regulation of commerce than they now are. Most of the bureaus and services now comprised within the Department of Commerce were originally established as branches of the older Departments, particularly the Treasury Department, from which were transferred, in 1903, the Bureaus of Navigation, Statistics, Standards, and Immigration, the Lighthouse

¹Other bureaus which are indirectly concerned with commercial regulation are the Bureau of Animal Industry, which supervises the movement of animals, meats and meat food products in interstate and foreign commerce, exercises important quarantine functions, and seeks to control and eradicate diseases of animals, particularly in times of epidemic; the Bureau of Plant Industry, which has on occasions made investigations into the best methods of marketing, transporting, and storing fruits; the Federal Horticultural Board, which administers the Federal plant quarantine act of 1912, having to do with the entry of foreign nursery stock and other plants and plant products, and the establishment and maintenance of a foreign and domestic quarantine on account of plant diseases and insect pests; the Office of Markets, which investigates and reports on the marketing and distribution of farm products; the Bureau of Chemistry, which inspects the conditions of manufacture, transportation, and sale of food and drug products, and makes investigations looking to improved methods of transporting food products; the Bureau of Statistics, which issues crop reports which are of great value to business men in prognosticating conditions; and the Office of Public Roads, which is energetically furthering the "good-roads movement."

²*Cong. Record*, XXXVI, 1903, p. 1036.

Board, the Lighthouse Establishment, the Steamboat-Inspection Service, the United States Shipping Commissioners, and the Coast and Geodetic Survey. From the Department of State came the Bureau of Foreign Commerce, and from the Department of the Interior, the Census Bureau. The U. S. Fish Commission and the so-called Department of Labor, then unattached to any of the eight executive departments, were annexed, and two new bureaus created, those of manufactures and of corporations. As its title and make-up indicate, the departmental functions were not confined to commerce, but included labor as well, but ten years later a separate Department of Labor was established.

The oldest of the institutions over which the Department of Commerce has supervision is the Lighthouse Service.¹ Although continuously in the Treasury Department until 1903, this service has many times been reorganized and placed under the supervision of various officers. By the act of August 7, 1789, Congress accepted the cession of the eight lighthouses then maintained by the States, and undertook to manage them through the Secretary of the Treasury. His functions were assumed by the newly created Commissioner of Revenue from 1792 until 1802, when the office was abolished. The secretary resumed control until 1813, when the commissioner's office was reestablished, and lighthouses were again placed within his jurisdiction. When for a second time his office was discontinued, in 1820, the management of the service was delegated to the Fifth Auditor of the Treasury, who remained in control, and was known as the General Superintendent of Lights, until 1852, when a more enduring organization was effected. The Lighthouse Board, then created, consisted of the Secretary of the Treasury, three naval officers, three engineer officers of the Army, and two civilians, eminent in science. In 1903 the Secretary of Commerce and Labor assumed the functions exercised before by the Secretary of the Treasury. The final act of reorganization was that of June 17, 1910, which abolished the Lighthouse Board and created in the Department of Commerce and Labor a Bureau of Lighthouses, with a Commissioner of Lighthouses in charge. The duties which devolve upon the service include the marking and lighting of the channels of harbors and navigable rivers; the installation and maintenance of aids to navigation; the testing of apparatus with a view to introducing improvements; and the publication of information concerning aids to navigation in the Weekly Notices to Mariners, which show the changes in lights, buoys, etc., and contain current information necessary for safe navigation.

Another institution, almost as old as the Government, by which commerce is facilitated and benefited, is the Census. The first census was taken in 1790, when the returns were made to the President. Beginning with 1800, the Secretary of State was given general supervi-

¹*Organization and Law of the Department of Commerce and Labor*, 65-66.

sion, which he retained until the establishment, in 1849, of the Department of the Interior, after which the head of that Department exercised supervisory functions until in 1903, when the work was transferred to the new Department of Commerce and Labor. Previous to 1902 the Census Office was discontinued at the expiration of the work of taking each decennial census and then reorganized for the succeeding census, but in that year it was transformed into a permanent and continuous institution. When it was transferred to the Department of Commerce and Labor in 1903, the designation was changed to "Bureau of the Census." Until 1880 United States marshals were required to take the census, but thereafter special supervisors and enumerators were employed.

The Census Bureau is now no longer maintained merely for the decennial enumeration of the population, but is charged with the compilation of special statistical reports on a variety of subjects. A census of manufactures is taken every five years, and the act providing for the census of 1910 required a similar census of agriculture. Under the act of 1902, moreover, the decennial collection of statistics is required in connection with transportation by water, express business, banking and loan institutions, the fishing industry, and in other fields. Quinquennially the bureau compiles statistics relating to street railways, telegraph and telephone lines, and electric light and power stations, and annually, on the production and distribution of cotton and forest products. These statistical reports are included in monographs affording valuable economic and historical information.

The Coast and Geodetic Survey was the first technical bureau established by the Government. In 1807 the President was "authorized to cause a survey of the coast of the United States to be made." The organization of the work was delayed by the war of 1812, and operations did not begin until 1816. The early work was done under the supervision of the Treasury Department, where the Survey remained until 1903, with the exception of two short periods, both before 1836, when it was temporarily supervised by the Secretary of the Navy. The connection with the Navy Department, nevertheless, was, until the Spanish-American war, a close one. For fifty years, previous to 1898, nearly one-half of the Survey vessels were both manned and officered by the Navy, but these duties have, since that time, been performed exclusively by civilians. The present organization dates from 1843, and the name "Coast and Geodetic Survey" from 1878. Previous to the latter year the appellation "Coast Survey" was used. The Survey is charged with the survey of the coasts of the United States and of coasts subject to its jurisdiction, and with the publication of charts covering these surveys. Its activities are not, however, confined strictly to the coasts. Rivers are surveyed to the head of tidewater or ship navigation; deep-sea soundings, and temperature and current observations

are taken in the Gulf Stream and Japan Current, as well as along the coasts; magnetic researches and observations are made on land and sea; heights and geographic positions are ascertained; and latitude and longitude are determined and triangulation work done in the United States. Publicity is given to the results of these observations through a variety of media, including some of especial benefit to mariners, such as sailing and harbor charts, general charts of the coast, Tide Tables, and Coast Pilots containing sailing directions. The Bureau is, with the Bureau of Lighthouses, a joint publisher of the weekly Notices to Mariners.

The Bureau of Foreign and Domestic Commerce is a consolidation of three bureaus, Statistics, Foreign Commerce, and Manufactures. Preceding the organization in the Treasury Department of the Bureau of Statistics (by the act of July 28, 1866), the Department had been systematically collecting statistics for nearly fifty years, under the authorization of the act of February 10, 1820. Even before that time the Secretary of the Treasury had been called upon by Congress for statistical reports concerning commerce. The information was secured by the collectors of customs, and compiled and published, after 1820, by a Division of Commerce and Navigation, which was consolidated with the Bureau established in 1866. The Bureau of Statistics originally published data relating to foreign trade alone; but, beginning in 1875, it was required to publish statistics of internal commerce, other than by railroad, as well. Since 1892 it has been required to publish statistics of imports and exports moving by rail as well as by water. A Statistical Office, established in the State Department in 1842, was organized in 1874 as the Bureau of Statistics. In 1897 its name was changed to Bureau of Foreign Commerce, to avoid confusion with other governmental statistical bureaus. Finally, in 1903, it was merged into the Bureau of Statistics above referred to. Its principal duty was the publication of consular reports. The final consolidation occurred in 1912, when with the Bureau of Statistics was combined the Bureau of Manufactures, to form the Bureau of Foreign and Domestic Commerce. The Bureau of Manufactures was one of the two new bureaus established in 1903. It was designed "to foster, promote and develop the various manufacturing industries of the United States, and markets for the same at home and abroad, . . . by gathering, compiling, publishing, and supplying all available and useful information concerning such industries and such markets, and by such other methods and means as may be prescribed by the Secretary or provided by law."

The Bureau of Foreign and Domestic Commerce is closely related to the promotion of commerce. To that end it issues publications containing a large amount of useful information. Daily Consular and Trade Reports, together with the reports of the commercial agents of the Department, contain up-to-date information regarding trade

conditions in foreign countries, opportunities for the expansion of both foreign and domestic trade, and information as to the service rendered by the Government for the promotion of commerce. Special bulletins relate to subjects of current commercial significance; a *World Trade Directory* shows the names of possible foreign buyers of American products; confidential circulars indicate current projects, involving purchases, which are of interest to American business men; the "Tariff Series" includes bulletins on such subjects as "Consular Regulations of Foreign Countries," and "Foreign Tariff Notes;" and a monthly sailing-dates bulletin shows the sailings from the principal ports of the United States to the principal ports of the rest of the world.

The publications mentioned are those which are not specifically related to the statistical functions of the bureau. The statistical publications are necessarily voluminous. The statistics of foreign commerce embrace tables showing imports and exports by articles, countries, and customs districts; the transit trade; the warehousing of imported goods; imports entered for consumption; ocean freight rates; and the movement of American and foreign vessels in the foreign trade. These statistics are collected in a large volume published annually. The *Statistical Abstract of Foreign Countries*, an annual publication, shows, in terms of American currency, weights, and measures, the imports into and exports from each country of the world. *The Foreign Commerce of the United States*, a monthly statement of the "total values of imports and exports," is also published. This publication, formerly entitled *Monthly Summary of Commerce and Finance*, has in the past contained monographs upon commercial and industrial subjects, and, until 1913, it presented figures concerning internal commerce, *i. e.*, the quantities of certain staple commodities, *e. g.*, live-stock, grain, produce, provisions, merchandise, lumber, fruits, coke, coal, and petroleum, handled at various principal markets. The Bureau also publishes *The Statistical Abstract of the United States*, a condensation of miscellaneous statistical information collected by the various branches of the Government.

The reason for the publication of so great a variety of statistics was stated by Secretary Nagle, in his annual report for 1911 (p. 78), as follows:

"Changes in the character of the imports and exports have materially affected trade currents, the share of our exports which is sent to Europe having fallen from approximately 80 per cent a quarter of a century ago to less than 64 per cent in 1911, and that to other parts of the world proportionately increased. These changes in the character of the commerce and its movements, as well as the increase in the volume of both imports and exports, have stimulated the desire on the part of the public for commercial information in much greater detail and to be presented with much greater promptness."

In 1905 four commercial agents were added to the staff of the Bureau of Manufactures and sent abroad with the object of promoting the foreign commerce of the United States. Manufacturers and

merchants, as well as the press, have expressed their appreciation of the services rendered by these agents through their reports on conditions abroad. Beginning with 1912, the commercial agents were also assigned to work at home, looking to the development of the export trade through personal contact with the manufacturers and merchants in whose interest they have carried on their investigations abroad. The number of men engaged in this work has been increased and the service extended. In order that this service may supplement rather than duplicate the work of consular officers, the men employed are chiefly technical experts, familiar with the conditions existing in particular branches of trade.

Another new departure in the work of the bureau lies in the cooperation which is now undertaken with representative trade organizations through conferences with their officers, through the use of their membership lists for the dissemination of confidential commercial information, and through filing with them plans and specifications for work which their members would be qualified to undertake. The part played by the Department in the organization of the new Chamber of Commerce of the United States, established in 1912, was a recognition of the importance of the trade associations. The Bureau, which for a year had been collecting information regarding American commercial associations, sent broadcast to these organizations an invitation to attend a conference called by the President. Some 700 delegates, representing 400 commercial associations located in every part of the United States, thereupon cooperated to form the new body which is to coordinate the unrelated efforts of commercial organizations, looking towards trade promotion.

The lack of as general a utilization of the facilities provided by the Government for the promotion of commerce as is possible has been recognized by the department, which, in 1911 and 1912, through the Bureau of Manufactures and its successor, the Bureau of Foreign and Domestic Commerce, published pamphlets entitled "Promotion of Commerce,"¹ containing outlines of the services maintained by the various governmental offices and bureaus. While the data thus presented were little more than an index to the activities of these agencies, the pamphlet was designed to be of assistance to manufacturers and merchants, to whom it was sent with the advice that they secure additional information from those bureaus and offices engaged in work of particular interest to them.

The work of the Bureau of Standards was inaugurated in 1830, when the Secretary of the Treasury was authorized to examine the weights and measures used in the various custom-houses. In 1836 the Department was ordered to furnish the States with copies of the standards adopted. Until 1901 the Superintendent of the Coast and Geodetic

¹Miscellaneous Series, Nos. 6, 6A, and 6B.

Survey, then in the Treasury Department, also served as the Superintendent of the Office of Construction of Standard Weights and Measures, a designation first used in 1882. The functions of the office were limited. The growing demand for a great variety of standards and for certification by the Government as to the accurateness of weights and measures led, in 1901, to the dissociation of the old office from the Treasury Department and its establishment as the National Bureau of Standards. The independent existence of the bureau was, however, of short duration, for in 1903 it was attached to the Department of Commerce and Labor and its name changed to "Bureau of Standards." The Bureau is the custodian of standard weights and measures which under the Constitution are fixed by the Federal Government. It constructs standards, together with their multiples and subdivisions, and compares the standards used in commerce, manufacturing, engineering, scientific investigations, and educational institutions with those adopted or recognized by the Government. The uniformity and precision in weights and measures, which the makers of the Constitution desired to insure, is secured by furnishing to official sealers, acting under governmental authority, and to private parties, accurate standards of length, mass, and capacity.

Congress first provided for a Steamboat Inspection Service by the act of July 7, 1838, thirty-one years after Robert Fulton, by running the *Clermont* from New York to Albany, demonstrated that the use of steam power in the propelling of ships was practicable. The enactment of the law was coincident with the initial trip of the *Great Western*, the first steamship built for the trans-Atlantic service. Under this law, Federal district judges appointed inspectors of hulls and boilers in their respective districts, but the supervision of the service was vested in the Secretary of the Treasury. The method of appointing inspectors was changed and added powers were given to the service from time to time. In 1852 the President was charged with the duty of appointing supervising inspectors; in 1871 a Supervising Inspector General, who is still in charge of the service, was authorized; and finally, in 1903, the Secretary of Commerce and Labor took the general jurisdiction out of the hands of the Secretary of the Treasury. The service is charged with the inspection of all vessels engaged as common carriers in interstate commerce, the licensing of the officers thereof, and the administration of the laws relating to such vessels and their officers and crews for the protection of life and property. It formulates such rules governing the building and operation of ships as public safety requires, inspects the materials used in steamship boilers, tests the boilers before they are placed in service, and determines the passenger-carrying capacity. It examines and licenses masters, chief mates, other mates in charge of a watch, pilots and engineers of steamships, and masters and chief mates of sailing-vessels of over 700 tons. These licenses it is empowered to revoke, in cases of incompetence, misbehavior, or negli-

gence. An annual inspection is made of the hulls, appliances, boilers, and machinery of all steam, gas, and motor vessels, to determine their stability, accommodations, and safety, including the provision of fire apparatus, life preservers, and life boats. Sailing-vessels over 700 tons and other vessels and barges of over 100 tons are also inspected annually with reference to the stability of their construction. Necessary repairs may be required to be made.

The regulations which the service makes as to the operation of vessels upon navigable waters relate to such subjects as the passing of ships, the transportation of gunpowder, the carriage on non-passenger vessels of persons not belonging to the crew, and the issuance of special permits for excursions. The laws for the protection of life and property aboard vessels, the enforcement of which is committed to the service, are of varied nature and considerable volume. They relate, among other things, to non-transportable goods, maltreatment of crews, commission of crimes aboard ship, and installation of fire-fighting and life-saving appliances.

The bureau in the Department of Commerce which is perhaps most vitally concerned with maritime commerce is that of Navigation, which is entirely distinct from the bureau of the same name in the Navy Department. Its varied duties were, at the time of its establishment under the Secretary of the Treasury in 1884, performed by a number of agencies in his Department and by the circuit courts. Various functions have since been added, and the bureau, which is one of those transferred to the Department of Commerce and Labor in 1903, is now charged with the enforcement of the great volume of Federal navigation laws, covering a wide range of subjects, and with the recommendation of changes in those laws. The bureau has over the commercial marine, including the merchant seamen of the United States, a supervision which is limited only by the grant of specific authority in certain respects to other governmental agencies. It "registers" American vessels engaged in the foreign trade, "enrolls" those engaged in the inland and coastwise trade, and "licenses" those of the latter which are of less than 20 tons measurement. It supervises the laws relating to the admeasurement of vessels, their original letters and official numbers, publishes annually a list of the vessels of the United States, and collects statistics of the merchant marine and ship-building industry. The commissioner examines the accounts of port collectors, surveyors of customs, and shipping commissioners, with respect to such matters as fines, penalties, and forfeitures required under the navigation laws, services to vessels, navigation fees, amounts collected on account of decease of passengers, tonnage-tax collections, and shipment and discharge of seamen.

The bureau relies for the fulfillment of its varied functions upon the cooperation of other agencies. The enforcement of the navigation laws, for instance, has from the time of its establishment been intrusted

chiefly to customs officers, who previously had jurisdiction in the matter. Those functions which relate to the protection of seamen are administered by shipping commissioners who were first appointed in 1872, and are stationed at important ports of entry on the seaboard. At points where there is no shipping commissioner the collector of the port performs the functions elsewhere assigned to the commissioners, including the registration of men seeking employment as seamen, the superintendence of their engagement and discharge, the rendition of aid to masters in compelling seamen to be aboard ships at the agreed time, and the facilitation of apprenticeships. The wide scope of the bureau's operations makes its commissioner an authority on maritime subjects. His annual reports contain not only valuable statistical data concerning the American merchant marine, but information in relation to registry laws, regulation of radiotelegraphy, ship subsidies, safety of life and property at sea, and other current questions of maritime policy.

The Bureau of Corporations was established in 1903, by the act which created the Department of Commerce and Labor, to perform duties of an investigative and informational character. Its powers of inquiry and publicity constituted an important part of the regulative machinery provided for corporations by the Federal Government. On the basis of its investigations into the organization, conduct, and management of joint stock companies and corporate combinations, including those engaged in interstate and foreign commerce, the President was enabled to make recommendations to Congress for legislation to regulate commerce. The Bureau of Corporations, as stated below, was, in 1914, merged into the Federal Trade Commission.

THE DEPARTMENT OF LABOR.

The only bureau of the new Department of Labor, established in 1913, which is closely associated with commercial matters is that dealing with immigration. In 1891 the office of the Superintendent of Immigration was established in the Treasury Department, and thereafter the National Government undertook the direct supervision of immigration matters. These had theretofore been left to State officials, who, after 1882, acted under the direction of the Secretary of the Treasury. The Bureau of Immigration, with a commissioner general in charge, was established in 1895, transferred to the Department of Commerce and Labor in 1903, and to the Department of Labor in 1913. From 1907 to 1913 it was known as the Bureau of Immigration and Naturalization, but two separate bureaus in the Department of Labor now deal with these questions. The immigration and Chinese exclusion laws are administered by the Bureau of Immigration, which maintains a rigid surveillance over all arriving steamships, as well as over emigrants departing from important European ports, destined to the United States.

INDEPENDENT GOVERNMENTAL AND INTERNATIONAL AGENCIES.

Of the agencies of government, unaffiliated with any of the executive departments, that having the greatest power to regulate commerce is the Interstate Commerce Commission, a body which, since its establishment in 1887, has become a powerful regulative agency, exercising a great influence over interstate transportation. Although designated as a "commerce" commission, its functions relate more specifically to matters of transportation. By virtue of its control over railroads and an increasing authority over water carriers, the commission has been able to regulate rates, eliminate special favors, and establish more convenient and safer service, thereby greatly facilitating the development of commerce.¹

In 1914, Congress created a Federal Trade Commission which took the place of the Bureau of Corporations. The Federal Trade Commission has much larger powers than the Bureau of Corporations possessed. It is an investigating and supervisory body created primarily for the purpose of maintaining fair competition among corporations engaged in interstate trade. Congress gave the Commission, which is a body of five men, large powers of investigation and minor powers of regulation. The creation of the Commission was intended to be a step towards the ultimate goal of Federal regulation of corporations engaged in interstate commerce.

Aid, regulation, and protection are extended to commerce by the Federal Government, not only through national agencies, but also through international bureaus, commissions, and congresses. Of these, the Pan-American Union has been the most active in fostering commerce. In 1881 James G. Blaine, when Secretary of State, suggested the convocation of a Pan-American conference, which was held in Washington in 1889-90. This conference established the International Bureau of American Republics, known since the fourth conference, held in 1910, as the Pan-American Union. While the union performs many duties, largely of an informational character, its great aim is to develop and maintain closer relations of commerce and friendship between the 21 member republics of the western hemisphere. Its publications, including a monthly magazine, special reports, and hand-books, relate particularly to commercial questions. An extensive correspondence looking to the promotion of trade is carried on, not only with the governments of the member countries, but with manufacturers, merchants, and others.²

¹The commission is discussed in vol. I, chap. xvii.

²Other international unions concerned with commerce, of which the United States is a member, are: The Universal Postal Union, International Radiotelegraphic Union, International Railway Congress, Permanent International Association of Navigation Congresses, Union for the Protection of Industrial Property, Metric Union, International Union for the Publication of Customs Tariffs, and International Office of Public Health. These are discussed in Reinsch, *Public International Unions*, etc.

THE JUDICIARY AND LEGISLATIVE AGENCIES.

The agencies thus far considered in discussing government aid and regulation of commerce were those within the executive branch of the Government. A survey of the Federal Judicial system indicates that there have been two courts established for the handling of commercial matters—the United States Court of Customs Appeals and the United States Commerce Court, both of recent creation.

The Court of Customs Appeals was created August 5, 1909, to hear all appeals from the decision of any board of United States General Appraisers in customs cases, relating to the classification of merchandise, the rate of duty assessed, fees and charges connected therewith, and any other appealable questions as to the laws and regulations governing the collection of the customs revenues.

The Commerce Court, in existence from 1910 to 1913, was designed to effect a speedy, uniform, and systematic enforcement of the interstate commerce law. Congress established the court upon the recommendation of President Taft, for the purpose of creating a tribunal which should eventually be a body of experts qualified to undertake the consideration of technical questions in a special field. The court, for reasons stated in Volume I, Chapter XVII, was disestablished after an existence of only three years.

The consideration of the legislative machinery of the Federal Government which deals with commerce has been left until the last, because, despite its importance, it is a changing mechanism and one which has little actual contact with commerce. Through its instrumentality are drafted the laws which are administered by the agencies which have already been considered. Although the legislative body is the creative body, and not the one which performs the specific acts of "aid and regulation" which have been considered in this chapter, its powers to aid and regulate commerce are none the less important. These powers are exercised largely through committees and commissions.

When the National Government came into existence, the general practice was to create select committees to handle subjects as they arose, and after the completion of the work so delegated, the committees ceased to exist. Some idea of the difficulties involved in this method of procedure may be gleaned from the fact that in the Third Congress, for instance, there were at least 350 select committees. Gradually the practice grew of creating standing committees, to whom were referred bills relating to the general subjects, over which they were given jurisdiction. This process has continued, until there are a large number of standing and a very few select committees at each session. The committee chambers are not only the laboratories where the legislative work of Congress is in large measure done; they also furnish the means whereby public opinion may most effectively be brought to bear

upon proposed measures, and the hearings which the committees hold do much to inform the public of the issues at stake in important national affairs upon which legislation is pending. In the period from 1902 to 1909, the House Committee on Interstate and Foreign Commerce alone issued 89 publications, including reports of public and private hearings, special investigations, etc., dealing with important commercial questions.

Of the Senate committees, those particularly concerned with commerce are the following: Commerce; Expenses in the Department of Commerce; Foreign Relations; Immigration; Inter-Oceanic Canals; Interstate Commerce; Public Health and National Quarantine; Railroads; Standards, Weights, and Measures; Transportation Routes to the Seaboard; Transportation and Sale of Meat Products. House committees similarly concerned are: Alcoholic Liquor Traffic; Expenditures in the Department of Commerce; Foreign Affairs; Immigration and Naturalization; Interstate and Foreign Commerce; Merchant Marine and Fisheries; Railways and Canals; Rivers and Harbors.

The Government of the United States has gradually built up many agencies for the regulation of commerce. Each of the three great branches of the Federal Government, but the executive branch in particular, is concerned with the regulation of trade. These governmental agencies have varied activities, many of which are of great importance. The United States Government, however, is the patron rather than the autocrat of commerce, its policy being to maintain commercial freedom by means of such restrictions as are demanded by the public for its own protection.

CHAPTER XXXVIII.

THE CONSULAR SERVICE OF THE UNITED STATES: ITS HISTORY, COMMERCIAL FUNCTIONS, AND INFLUENCE UPON AMERICAN COMMERCE.¹

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The American consular service originated in the year 1776, when the Congressional Committee of Secret Correspondence appointed Silas Deane as political and commercial agent for Europe, and Thomas Morris, a half-brother of the great financier, Robert Morris, as commercial agent. Both went to France, and there assumed consular functions only as a matter of necessity. The "commercial" functions delegated to them at the outset were of a fiscal nature, involving such matters as the purchase of supplies, but with the growth of commerce they were compelled to attend to the protection of American seamen and shipping in French ports and to other duties of a similar nature.

The chief functions performed by consular officers of this and other nations, during this period, related to the protection of the persons and property of the citizens of the country in whose service the consuls were employed. While retaining their earlier duties, American consular officers, in common with those of other progressive nations, during the latter half of the nineteenth century, undertook other tasks which almost overshadow in importance the indispensable functions which formerly devolved upon them. Still solicitous for the welfare of citizens and of their property, when either or both chance to be abroad, consular officers became actively engaged in broadening the outlook of Americans so that they may more and more have occasion to extend

¹This chapter is to a large extent based upon the volume by Professor Chester Lloyd Jones, *The Consular Service of the United States: Its History and Activities* (1906), which has been condensed, rewritten, and brought down to date. Use has also been made of Emory R. Johnson's article on "The Early History of the United States Consular Service, 1776-1792," in *Political Science Quarterly*, XIII. March 1898, p. 19.

their interests to foreign countries. To his duties, which formerly involved the aid and protection of fellow-citizens, settlement of disputes between masters and seamen, care of sick and disabled seamen, protection and superintendence of maritime interests generally, and, finally, protection of the customs revenue, the consul added those of an active commercial agent. The modern consul studies the needs of the population within the district where he is stationed, with a view to ascertaining opportunities for the extension of the foreign trade of his own nation. When once this trade has been established, his duties of protection are extended to it.

Obviously, the present-day consular position is not one that can be filled with success by the purely political appointee. The new duties call for keen, active men, and the interests which depend upon the service to-day are better organized and prompter to complain of inefficiency than were the classes served by the consular agents of yesterday. New functions have brought with them insistent demands for reorganization to which Congress has not turned a deaf ear. What the changes have been, not only in the nature of the service performed and results achieved, but in the personnel and organization as well, it will be the purpose of this chapter to indicate. The sections immediately following will deal with the legislative history of the service, while subsequent sections will treat of its commercial functions and its influence in building up international trade.

THE PRE-CONSTITUTIONAL CONSULAR SERVICE.

The status of the consular service during the days of the Continental Congress and the Confederation is of interest, because the organization then effected was the one adopted by Congress in the act of April 14, 1792. Meanwhile, following the adoption of the Constitution in 1789, the preexisting service continued to represent the United States at foreign ports. Originally no distinction was made between diplomatic and consular officers. The first representatives of the revolting colonies were charged with the performance of duties of a diplomatic and fiscal nature, and it was not until later that the consular functions were added. Commissioners sent to France in 1776, and the ministers who succeeded them, performed all three functions, while commercial agents performed consular and fiscal services. At the close of the Revolutionary War, when fiscal agents became unnecessary, the office of commercial agent was continued for the exercise of strictly consular functions.

The existence of different appointive agencies and the failure to define specifically the powers of early foreign representatives led to a great deal of confusion, which was not remedied until 1780. The treaty of amity and commerce concluded with France in 1778 had provided for the stationing of consular officers at the ports of the two

countries. The first consul appointed by Congress under this authorization, and, strictly speaking, the first consul sent abroad from America, was Colonel William Palfrey. His authority made him in reality a consul-general, with jurisdiction over both American consular and fiscal affairs in France, and his salary was fixed at \$1,500 per annum, in lieu of all commissions which he might collect. Palfrey perished when his ship was lost at sea. Congress, learning that he had not reached France, appointed Thomas Barclay vice-consul, in 1781, and when news of the disaster reached Philadelphia, Barclay was made consul. Although the division of powers between diplomatic and consular officers was not as distinct as it is at the present time, this action relieved the commissioners at Paris (in accordance with their wish) of the handling of consular matters, which had proved embarrassing for them, situated, as they were, miles from the seaboard and burdened with other onerous duties.

About the same time another distinct improvement was made in the handling of foreign affairs. The correspondence with representatives abroad had been carried on by the President of Congress and the three Congressional committees on secret correspondence,¹ commerce, and the marine. The first of these conducted the greater part of the correspondence until, in 1781, Congress established the Department of Foreign Affairs and delegated this work to the paid secretary who was placed in charge. Robert Livingston and John Jay were the only pre-constitutional Secretaries for Foreign Affairs. Their authority was limited by Congress, which required that, before being forwarded, important communications to foreign representatives should be submitted to it.

The establishment of international relations with countries other than France was a matter of slow development. Treaties of amity and commerce, similar to the French treaty, were concluded with the Netherlands in 1782, with Sweden in 1783, and with Prussia in 1785, all of which provided for the establishment of consulates. A similar right was obtained, with respect to Great Britain, following the final treaty of peace of September 3, 1783. However, the Congress of the Confederation did not order until 1785 "that the Secretary for foreign affairs report the number of consuls and vice-consuls necessary to be appointed by Congress and the foreign ports in which they should respectively reside." Following the report made in accordance with this order, the first provision for a consular service was made in the following resolution (October 28, 1785):

"Whereas it is expedient that consuls should be appointed in the different states with which the citizens of the United States are engaged in commerce; therefore,

¹Established Nov. 29, 1775; name changed in April 1777 to Committee on Foreign Affairs.

"Resolved, that the ministers plenipotentiary of the United States in Europe, and where there is no minister the Chargé d'affaires, shall exercise the powers of a consul general for the Kingdom or states in which they respectively reside, provided that no additional salary be allowed for such service."

This half-way measure followed a fruitless attempt to establish consuls at 18 European ports and at Canton, and meant, in fact, very little in the way of a consular service, for during the period of the Confederation the properly qualified diplomatic officers were stationed in only three countries—France, Spain, and Great Britain. Although financial considerations had doomed to failure the resolution establishing 19 consulates, Congress was not averse to appointing consuls, for on January 26, 1786, both a consul and a vice-consul were authorized, to reside at Canton, and to serve without pay in any form.

The first definite statement of the powers and duties of American consuls is to be found, not in the acts of Congress nor in the treaties referred to, but in a convention with France, signed November 14, 1788, in accordance with the requirements of the treaty of 1778 that the functions of the consuls, which the contracting parties were permitted to appoint, should "be regulated by a particular agreement." France was desirous of action in this respect, for the legislative and administrative jurisdiction exercised by the several States over foreign commerce hampered the work of French consuls and often resulted in controversies with State authorities. The pressure of other matters in Congress, the delays in transportation, loss of papers, and opposition of such prominent Americans as Jefferson and Jay, delayed the negotiation of the "particular agreement" contemplated, but it was finally signed at Paris, by Jefferson, as American Minister, in 1788, and unanimously approved by the Senate the following year.

The commercial duties devolving upon consular officers, under this convention, were not numerous. Consuls and vice-consuls were authorized to establish chanceries for the swearing and filing of contracts and other documents between "persons of their nation." They were to handle questions arising between subjects or citizens of their own nation concerning losses sustained at sea, and were to do whatever they judged proper to save stranded ships. Over vessels flying their national flag they were to exercise police power, without, however, interfering with the local police. Deserters from ships' crews might be caused to be arrested and deported. Suits between citizens of either nation, who were in the other, particularly suits between masters and sailors, were made subject to the jurisdiction of consuls and vice-consuls. Expedition of commercial cases through "particular tribunals and forms" was provided for the merchants of each country when in the other. The connection of consular officers with commercial matters would necessarily be a close one, for the language of the convention contemplated that they might engage in business on their

own account. In the definition of consular duties, the authorities of the Confederation had done better than in the creation of a service for "the convention as a whole was considered at this time a model instrument and was praised by foreign authorities as 'the most complete consular convention ever concluded and likely to be taken as a precedent for the future.'"¹

AN INADEQUATE CONSULAR SERVICE, 1789-1856.

It was a very incomplete consular service that the Union inherited from the Confederation. Congress passed an act, which was approved by President Washington July 1, 1790, "providing the means of intercourse between the United States and foreign nations." The appropriation was a modest one. The President was "authorized to draw from the Treasury of the United States a sum not exceeding \$40,000 annually, to be paid out of the money arising from the duties on imports and tonnage, for the support of such persons as he shall commission to serve the United States in foreign ports, and for the expense incident to the business in which they may be employed." The ministers at foreign ports continued to exercise the functions of consuls-general, remaining at their posts without, in all cases, receiving new appointments.

Although this was a modest beginning, the nation was in a much better position to deal with foreign affairs than it had been prior to the adoption of the Constitution. The Constitution had provided that the President² "shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur; and he shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other Public Ministers and Consuls." To assist the President in the conduct of foreign relations, the Department of Foreign Affairs was established by the act of July 27, 1789, and under Jefferson as Secretary it conducted consular correspondence and supervised the service generally.

Although Congress waited three years before enacting consular legislation, President Washington was not slow to exercise the appointive power conferred upon him by the Constitution in the establishment of consular offices abroad. Jefferson's influence as Secretary of State was important, both in the establishment of the service and in the precedents governing its action. Before Jefferson became Secretary of State, March 22, 1790, President Washington³ had appointed only one consul, but in the summer following, a number of appointments were made, and during the first three years of the administration, before Congress acted in the matter, 15 consulates and 6 vice-consulates had been established. The consuls were at the outset authorized to dele-

¹Jones (p. 4), who repeats language quoted by Secretary Seward in a letter to the Senate Finance Committee, March 16, 1864.

²Art II, sec. 2.

³Samuel Shaw, Canton, Feb. 10, 1790.

gate agents to represent them in the ports in their districts. The consular officers whom Washington appointed were not compensated out of the annual appropriation for the conduct of foreign intercourse, but by fees which they collected and the profits of the business in which they engaged on their own account.

Congress took its initial action in respect to the consular service in the law approved April 14, 1792, which was enacted to carry into full effect the consular convention with France, ratified more than two years before. The act, though a brief one, was the only legislation of fundamental importance regarding the organization of the consular service until 1856. It summarized the principles laid down in the French convention, defined with more exactitude some of the consular duties with respect to succoring American seamen in distress, and authorized consuls to receive protests from any person, American or foreign, relative to the interest of any citizen of the United States.

It should be noted that this act did not create a consular service, but merely specified the powers and duties of the existing service, and did not aim even to be a complete statement thereof. The act did, however, specifically mention the Barbary States, and provided that salaries might be paid to such consuls as were required to be stationed there. In 1795, "as no one would accept the position otherwise," salaries¹ were authorized for the consuls established in Tunis, Tripoli, and Morocco; and, in 1797, similar action was taken with respect to Algiers.² The efficiency of the service during the next fifty years was seriously impaired by requiring all other consular officers, with few exceptions,³ to rely for their living upon fees and private business. Washington made a good beginning in the establishment of a service which rendered indispensable protection to American shipping interests. During his first administration he appointed 30 consuls and 6 vice-consuls, who were well distributed throughout the commercial world.⁴

In the period antedating 1856 the amendments made to the fundamental law of 1792 related chiefly to the duties of consular officers with respect to seamen. Acts of this nature were passed in 1803, 1811, 1840, 1845, and 1850. They provided among other things that seamen were to be discharged in a foreign port only on approval of the consul,

¹\$3,000 each.

²Originally \$4,000; reduced in 1810 to \$3,000.

³"Exceptions are: allowance for salary, \$2,000 to consul at Paris; and \$2,000 salary, with \$2,800 for stationery, office rent and clerk hire, to consul at London. Acts of United States, July 19, 1836, March 3, 1837, August 26, 1842." Jones, 6.

⁴List prepared by the chief of the Bureau of Appointments (State Department) for Mr. M. J. Blair, who includes it in a thesis submitted at the University of Wisconsin, in 1910, for the degree of bachelor of arts. "A Study of Appointments to the American Consular Service," shows appointments to the following ports: *Consuls*: Canton, Madeira, Liverpool, Dublin, Bordeaux, Nantes, Rouen, Hispaniola, Martinique, Bilbao, London, Surinam, Santa Cruz (2), Bristol, Lisbon, Morocco, Copenhagen, Algiers, Calcutta, Havre, Falmouth, Cadiz, Alicante, Curaçao, St. Eustatia, Hamburg, Demarara, Malaga, Amsterdam. *Vice-Consuls*: Cowes, Marseilles, Hamburg, Havre, Fayal, Poole.

and that when discharged they were to receive advance wages, and their transportation home on American merchantmen was to be arranged for. All laws relating to the discharge and return of seamen were extended to whaling ships; greater care was required in the making up of ships' lists; and an abortive effort was made to prevent cruel treatment of sailors. During these years of expanding trade, when the American flag was a familiar sight in all seas, the consular service was not extended into new fields so fast as was commerce. Some of the legislation enacted for the protection of American seamen abroad was therefore ineffective, and an attempt to remedy this difficulty was made in the act of March 3, 1845, which provided that the "commanding officer of a vessel or fleet on the high seas or in foreign ports where there is no United States consul . . . has all the powers of a consul as regards mariners." A further effort to control the conduct of mariners abroad is to be seen in the requirement that ships' papers be deposited with the consul during the stay of the ship in port.

These early functions, assigned to American consuls, which related only to the protection of citizens and their property, were in 1818 enlarged to include the protection of the national revenue. The act to regulate the collection of duties on imports and tonnage, approved April 20, 1818, provided that American consuls must certify the invoices of all goods declared for shipment to the United States, in foreign ports, and subject to ad valorem duties under the tariff. The certification referred to was to be given only after the exporter had sworn to the value shown in the invoice. Congress further showed a disposition to increase the services of consular officers when in 1845 it provided that they should pay the amount of postage due on letters destined to the United States and held in foreign ports.

Other legislation prior to 1856 related to the question of the remuneration of consular officials. The salaried Barbary Coast officers were prohibited from trading on their own account, this being the first instance of an interdiction which was not to become general until more than a half century later. Although consuls were authorized to collect additional fees, the provision of outfits was discontinued in 1810, and the compensation was not generally sufficient to secure an effective service. As the commerce of the United States grew in volume, there was considerable agitation for reform in the consular service, and it centered about these matters of compensation, the chief point of attack being the fee system. An investigation instituted by Secretary Van Buren, in 1830, indicated that the compensation was so low as to make it impossible for officers to maintain the social standing and influence which their positions demanded. Dishonesty was the consequence. Irregular and extortionate fees resulted from a practice of levying as much, in each instance, as could without difficulty be collected. False certification of papers was resorted to, and fictitious claims for remuner-

ation on account of money alleged to have been expended in the relief of destitute sailors were filed. There were other evils. Trading consuls gained official knowledge and made personal use of the business secrets of their rivals; the absence of definite rules governing the rights and privileges of consuls resulted in different usages at different ports and opened the way for dishonest practices; and business failures sometimes led consuls to engage in ventures unbecoming an officer of the United States Government.¹ The inertia which blocked all efforts to improve the service successfully withstood plans for reform following investigations made in 1831, 1838, 1844, and 1846. In 1846 a select committee of the House reported "that they find the consular system . . . very imperfect . . . and by no means adequate to the present commerce of the United States."

Meanwhile the service had been growing numerically and geographically and the inadequacy of the ineffective organization adopted in 1792 became more and more apparent. The *Official Register* for 1851 shows that the United States was then represented by consular officers at 203 different foreign ports. This was exclusive, however, of "consular agents," who, although they had no legal status, were appointed by individual consuls to serve at ports at which American ships touched in their consular districts. Such agents performed the same duties as did the consul, to whom alone they reported, and with whom they divided the fees collected at the outlying office. Although departmental regulations required it, these appointments were not always reported to the Secretary of State.

CONSULAR REFORM ACTS OF 1855 AND 1856.

In 1855 a law was passed directed chiefly towards remedying the fee system. Doubts as to its constitutionality led to the passage, the following year, of an act which was aimed not only at the evils of the fee system, but also at the difficulties arising out of the lack of precision in former statements of the rights and powers of consular officers.

This so-called "reorganization" attempted to remedy the fee evil by authorizing the payment of salaries to the higher officials of the service.

¹Secretary of State Livingston, who made an investigation of the service in 1831, gives a vivid picture of its status at that time. In his report he said: "Our consuls, with very few exceptions are commission merchants, anxious, like all other merchants, to increase their business and obtain consignments. In many, perhaps in the greater number of cases, the place is sought for chiefly for the advantage and the influence it will give to extend the commercial affairs of the officer. Can it be believed that this official influence will always be properly exercised? When it is, will not contrary suspicions be entertained? This must create jealousy, detraction, and all the arts that rivalry will exercise and provoke, amidst which the dignity of the public officer is degraded and his influence with the foreign functionaries lost. The consul at least, therefore, if not the vice-consul, ought to be salaried officers. They will never then by their countrymen, be suspected of acting toward them as their commercial interest, not as their duty requires; and their complaints in behalf of their fellow citizens will be attended to, because they will not be liable to the suspicion of advocating their own interest; consular offices would no longer be held in counting houses, nor the consul himself called from defending the cause of an injured American citizen to sell a barrel of sugar or to dispatch the settlement of an account." (Senate Doc. No. 83, 22 Cong., 2 sess. Mar. 2, 1833, p. 3.)

Two classes of consular offices were established, under schedules B and C.¹ Schedule B included, in addition to 82 consuls and 3 commercial agents, 7 consuls-general, a grade first authorized in 1854, at Alexandria, Egypt. This grade was originally a matter of necessity in Oriental countries, where rank and title were regarded as of great importance, and a consul found himself at a disadvantage in dealing with public officials. Gradually the office was extended to every important country, and a limited jurisdiction granted the consul-general over the consulates within the same country. For the 92 officers listed in schedule B, salaries were specified, ranging from \$1,000 at several less important points to \$7,500 each at Liverpool and London. These salaries were to be in lieu of all official sources of income, and the officers were not to engage in business.

Schedule C included 35 consuls and 6 commercial agents, for whom salaries ranging from \$500 to \$1,000 were specified. No fees were to be allowed these officers, but upon the privilege of private trading no prohibition was placed. The provision that officers under both schedules were entitled to compensation only if citizens of the United States embodied the established policy of the State Department, which had, for instance, issued a circular June 1, 1853, declaring that the employment of foreign clerks was "no longer to be countenanced," and that, if a United States citizen could not be secured, the department should be advised of the fact.

In 1857 there remained 101 out of 237 consular officers who were unaffected by this reorganization—officers who still received fees and fees alone for their services. An attempt to avoid irregularities was made, however, through a provision authorizing the President to prescribe the amount of the official fees when the law did not do so. Schedules of the fees authorized were to be posted, and quarterly reports of all official fees collected were to be made to the Treasury. This was a distinct advance over the period before 1856, when the entire service collected fees (whereas now only a fraction of it did so), and when the authorized rates were only partially stated by law and only incompletely reported, sometimes not at all. It should be noted, however, that the law of 1856 did not reach unofficial fees, which continued to be collected by all consular officers.

With the grant of salaries, former allowances for various expenses, such as clerk hire, ceased, except that non-trading consuls were allowed for office-rent an amount equal to one-tenth of their salaries, and that stationery, flags, and other similar articles were furnished by the Government. The act authorized the appointment of 3 interpreters for Chinese posts and 25 pupils, whom it was contemplated, should, while learning the duties performed by the service prior to taking higher positions, serve as clerks in important consulates. When, in

¹Schedule A concerned diplomatic officers.

1857, the section authorizing their appointment was repealed, the complaint as to insufficient remuneration was renewed, for the consuls were obliged to pay for clerk hire out of their none too munificent salaries. The plan for a trained service was likewise thwarted.

The law of 1856 also aimed at reform in another direction. It gave considerable space to a more comprehensive and clearer exposition of the rights, powers, and duties of consular officers than had previously been attempted by Congress. These regulations extended to surety bonds, records, reports, absences, collection of fees, discharge of seamen, performance of diplomatic functions, etc. The President was, moreover, authorized to issue such additional regulations concerning the conduct of the affairs of the service as in his opinion the public interest demanded. The act furthermore marked a distinct departure from earlier practices with respect to the view taken of the scope of consular duties, which previously had been chiefly protective. Although the Secretary of State had, by the act of August 16, 1842, been required to inform Congress annually of such changes and modifications in foreign commercial systems as had come to the knowledge of the Department, no adequate provision had been made either for the transmission of such information to the Department or for its compilation there. The law of 1856 was the first to require consuls to furnish commercial information for the benefit of the people of the United States, and reports of the commercial relations of the United States with foreign nations were thereafter regularly issued.

A SERVICE UNRESPONSIVE TO COMMERCIAL NEEDS, 1856-1906.

The modifications thus brought about remained unchanged in any fundamental respect for fifty years. Until the passage of the Lodge bill, in 1906, efforts at reform reached matters of detail only and not broad questions of organization. Questions of consular pay were those which caused the greatest amount of discussion following the partial reorganization of 1856. It was urged, and with reason, that compensation still did not bear a proper relation to the importance of the posts, and relief was granted in several ways. Thirteen consular pupils were authorized in 1864, thus providing a limited number of consulates with clerical assistance at Government expense. This did not, however, achieve the other end aimed to be subserved—the training of men for higher posts—inasmuch as the appointees preferred the security of their humbler positions to the insecurity of consulships, subject to the uncertainties of the spoils system. The allowance for the hire of regular clerks was withdrawn in 1856, and was not reestablished until 1874. After the latter year, however, both the appropriations for clerk hire and the number of consulates affected were gradually increased. In 1882 a separate fund of \$6,000 was created for clerkships not named in the law, which were to be established at the discretion of the Secretary of State. By 1896 the number of consulates specifically

provided with clerks had risen to 84, and the general fund had increased to \$30,000. The rent-allowance of non-trading consuls was, in 1872, increased from 10 to 20 per cent of their salaries. Another indirect method of increasing salaries was authorized in 1874, *i. e.*, the payment of compensation to vice-consuls of foreign citizenship. Appointments of this nature had become a practical necessity, but the policy of employing Americans, whenever possible, was still followed. There were also numerous cases of direct action in respect to increased salaries, scarcely a year passing during which changes were not made. Unfortunately, however, these changes were not dictated by a consistent policy looking to the adaptation of the service to commercial needs, and the resulting disparities in income at the various consulates appeared to have no basis, either in the relative importance of the posts or the demands made upon incumbents. In 1868 a feeble attempt was made to adjust the salary to the importance of the post by providing for the increase of certain low salaries, where the fees were high; but the law did not achieve its object, inasmuch as the amount of fees collected often failed to measure the importance of the post. Great injustice resulted from the lack of system with reference to remuneration. Before the reform of 1906, the income at a few posts like London and Paris had come to be enormous, when the item of unofficial fees was considered, while at other points, which were often undesirable and unhealthy, the total income was represented by salaries as low as \$1,500. On the other hand, with respect to this question of the direct increase of salaries, there are some evidences of a sincere effort to make the service conform to the demands made upon it. Between 1856 and 1901 there were added to the schedule (B) of salaried and non-trading consuls 220 consulates. Salaries were increased in 149 cases to keep pace with the growing importance of posts, while for an opposite reason they were decreased in 43 cases and the offices entirely abolished in 80 cases. In addition, 21 posts, once dropped, were reestablished.

Except in the early part of the period, commendable action was also taken by the elimination of offices from the other schedule (C)—that including salaried consuls permitted to engage in trading. Starting with 41 offices in 1856, an increase was effected in 1864, when 22 commercial agents were appointed in this class. From 1870 to 1895, however, there were generally less than 6 offices under schedule C, and in 1901 only 12.

What has been said in regard to schedule B indicates, what was indeed a fact, that the salaried force, as a whole, increased numerically during the period, which was a great advance over the days preceding the reorganization of 1856, when the regular method of paying consuls was by permitting them to collect fees. But for those officers who still collected fees, the arrangements continued to be unsatisfactory, although less so than formerly. Irregular collections and incomplete

returns were causes for criticism; other evils were involved in the collection of unofficial fees, which were still permitted to be charged at all offices and sometimes amounted to far more than the salaries attached to the offices.¹ There was less disposition to remedy matters of compensation in connection with fees than in other respects, and such modifications as were made were only in matters of detail. With respect to trade with Canada, fees were reduced and were in some cases entirely removed; those chargeable on American ships for official services were entirely removed; and those collected by consuls, paid by fees, and consular agents were modified. An improvement with respect to the consular agents was effected in 1856, when their choice was made dependent on the approval of the Secretary of State. The agent was, by the law of 1856, entitled to receive the fees he collected, or such amount thereof as the President directed, the balance going to his principal officer, who then found it possible by securing the appointment of a number of consular agents, to increase his own income at the expense of the Treasury, for the fees, if collected through his own office, would have belonged to the Government. This method of defrauding the Government was curtailed but not removed by the law of 1868, providing that "all moneys received for fees at any vice-consulate or consular agency of the United States beyond the sum of \$1,000 in any one year, and all moneys received by any consul or consul-general from consular agencies or vice-consulates in excess of \$1,000 in the aggregate from all such agencies or vice-consulates, shall be paid to the Treasury of the United States."

The law of 1856 continued an old abuse in permitting consular agents to engage in trade. Trading consuls were certain to derive personal gain from an intimate knowledge of the trade secrets of their rivals. The evil was not only pernicious but extensive, inasmuch as, at the close of the period, the consular agents were the most numerous class in the service, constituting, numerically, almost half of it.

During the period from 1856 to 1906 the protection of the revenue of the United States through the certification of invoices became an increasingly important function of the service. In 1863 the law regarding certification, which formerly had applied only to articles subject to ad valorem duties, was extended to all dutiable goods, and various other provisions were made from time to time to prevent customs frauds. But in spite of efforts to prevent them, undervaluation frauds continued, and in fact still give considerable concern to the State and Treasury Departments. Dr. Jones expresses the conviction² that the only means for their prevention lies in the "individual efforts of the various consuls in detecting frauds."

¹The Third Assistant Secretary of State testified (1900) as to these amounts: "London safely \$20,000; Paris probably as much."

²*Consular Service of the United States*, 26.

Between the reorganizations of 1856 and 1906 there was a particularly rapid growth of the consular service, due to the impetus given by the imposition of heavier customs duties following the Civil War. For the proper protection of revenue, officers were stationed at inland manufacturing towns, where the assistance rendered to visiting Americans was slight. The foreign trade meanwhile increased rapidly and contributed also to the growth of the service. Whereas, in 1857, there were only 237 consular offices, in 1905 the number had increased to 334. In neither case do the figures denote the scope of the service, for they do not include the consular agents, who numbered 391 in 1905, but were not recorded in the list of consular officers at the earlier date.¹

Certain defects in the service as it was constituted from 1856 to 1906 indicate the basis for the reform movement which, although it began much earlier, did not bear fruit until 1906. The chief of the faults were these: (1) the service was only partially organized on a salary basis (often an inadequate one), and retained in large measure the pre-existing evils of the fee system; (2) the organization was inflexible and not responsive to the commercial needs of the country; (3) "it left appointment to rest on political influence, where it was most important that it should rest on fitness, and it left tenure of office dependent on political changes at home, where it was most important that the advantages of experience in the service should be preserved;"² and (4) there was no inspection of consular offices. An act passed July 11, 1870, authorized such an inspection, and the effective work done by Inspector Keim resulted in some remedial legislation, but the law was repealed May 22, 1872, and no adequate substitute provided until 1906.

EFFORTS TO REFORM THE SERVICE, EXECUTIVE ORDERS.

The history of the reform movement is merely a repetition of the story of Congressional apathy which characterized the period preceding the partial reorganization of 1856. As early as 1868 the shortcomings of the service were called to the attention of Congress by the Committee on Retrenchment. Reforms were unsuccessfully attempted in 1872, 1884, and 1886. Finally, in 1895, a series of efforts began which resulted in the law of 1906.

President Cleveland meanwhile took the matter into his own hands and attempted to introduce, by an executive order, a merit system. Nine applicants for consular positions had been examined in 1866, and

¹*Register of the Department of State, 1905.* The status of the service on July 1, 1905, less than a year before the passage of the reorganization bill, was as follows:

Schedule B (salaried and non-trading officers):		Schedule C (salaried; trading permitted):	
Consuls-general.....	58	Consuls.....	6
Consuls.....	216	Other Offices (fee; trading permitted):	
Commercial agents.....	11	Consuls.....	27
		Commercial agents.....	16

The total (334) does not indicate the numerical strength of the service in 1905, when there were over 1,000 appointees.

²Jones, *Consular Service of the United States*, 26.

executive orders issued by President Grant, in 1872 and 1873, pursuant to the civil service act of 1871, resulted in the examination of a number of applicants in 1873 and 1874, but the reforms were merely temporary. The examinations instituted by President Grant were given up when Congress refused to appropriate for the Civil Service Commission. President Cleveland's order of September 20, 1895, provided for the filling of vacancies in consulates carrying a salary of from \$1,000 to \$2,500, either (a) by the transfer from some other branch of the State Department of a person qualified by his training to fill the post; or (b) by the appointment of a person who had previously rendered satisfactory service in the Department; or (c) by the appointment of a person, who, first having furnished evidence of character, is then selected by the President for examination, whereby his qualification for the post is determined. The Secretary of State was authorized to select the subjects and prescribe the method of conducting the examinations, which were to be given under the auspices of a board of three persons selected by him. President Roosevelt, by an executive order dated November 10, 1905, extended these requirements to all consulates paying over \$1,000, regardless of the upper limit.

These orders did not effect much improvement in the service, though the officials of the State Department have said that the character of applicants was somewhat improved. Events proved that the merit system could not be established solely by executive order. The Director of the Consular Service, Mr. Wilbur J. Carr, at a hearing before the House Foreign Affairs Committee, in 1912, told what happened:¹

"When Mr. McKinley became President, there was the usual pressure brought to bear for foreign service appointments, with the result that from March 4, 1897 to November 1, 1898, it has been stated that 238 out of a total of 272 members² of the consular service had been recalled and their places filled by new men. The examination regulations were nominally in force, but the examination in fact was little more than a form."

The final impetus to the movement for legislative reform was given by the business interests of the country through the medium of chambers of commerce and other trade organizations. As early as 1894, business men had begun the agitation for a consular service which would furnish to American exporters the same efficient aid that the consular systems of foreign countries furnished to rival manufacturers abroad. Business men appeared before the Congressional committees dealing with foreign affairs, presenting arguments for reform and petitions from boards of trade and similar bodies. Publicity was secured through the press and through the issuance of pamphlets which secured a wide circulation,

¹House Report No. 840, 62 Cong., 2 sess., IV, p. 9.

²This is approximately the number of *consulates* in 1897. Blair found that McKinley made 257 changes, altogether, in his first term; and Cleveland 288 changes, in his second term (1893-97). He also found that most of these changes were made early in the term, in 1893, and before the merit system was introduced. This weakened the effect of the order.

and the agitation culminated in a consular reform convention, held in Washington in March 1906, during the session of Congress which passed the reorganization bill.

REORGANIZATION OF THE SERVICE. THE LODGE ACT, 1906.

Henry Cabot Lodge, who as early as 1896 had been a strong advocate of consular reform, introduced in the Senate in 1905 a bill, drawn by Secretary of State Elihu Root and himself, which finally passed Congress and was approved by the President August 5, 1906. This law embodied many of the reforms contemplated for fifty years, and placed the service upon a good working basis.

The schedules of 1856 were discarded, and in their place were established seven classes of consuls-general, with salaries ranging from \$3,000 to \$12,000,¹ and nine classes of consuls, with salaries ranging from \$2,000 to \$8,000.² The official titles adopted in preceding laws were retained, except that the grade of commercial agent was abolished. Consular agents, it was provided, might be appointed, as before, when necessary. Five consuls-general at large were authorized to act as inspectors of consulates, at an annual salary of \$5,000. These officers are to be appointed from the consular service and, under the direction of the Secretary of State, are to inspect each consular office as often as once in every two years. A limitation is placed upon the eligibility of foreigners for appointment by the provision that clerical positions paying \$1,000 or more must be held by American citizens.

The reason for the general increase in salaries authorized in the act is to be found in the section which accomplishes the much-needed reform, whereby "all fees, official or unofficial, received by any officer in the consular service for services rendered in connection with the duties of his office or as a consular officer" are to be paid into the Treasury of the United States. The "sole and only compensation" of consular officers is to be the legal salary, with the single exception that consular agents are to receive one-half of the fees paid into their offices, but not more than \$1,000.³ This arrangement, which was the usual one, had been made uniform by an executive order issued in 1898 by President McKinley. The new law required that notarial services, hitherto "unofficial," be furnished by consular officers and that the fees be remitted to the Government. Thus the unofficial fees of all officers (except one-half of those received by consular agents), which had in many cases reached high amounts, were henceforth to be paid to the Government. The consulates⁴ paid by fees were placed on a salary

¹London and Paris. These salaries had been \$5,000—the highest paid in 1905. (58 Cong., 3 sess., 1905. United States Statutes, ch. 1407, p. 921.)

²At Liverpool—previously \$5,000.

³This limitation affects only comparatively few officers. The fees collected at only 24 agencies exceeded \$2,000 in 1912. The highest was Sonneberg, Saxe-Meiningen, \$5,847.89.

⁴There were 43 in 1905.

basis; and only consular agents were in the future to be compensated by fees. Trading privileges, moreover, were denied to 49 officers who had possessed them in 1905, and henceforth could be exercised only by consular agents. The prevention of fraud in making official returns of fees was accomplished by providing for the affixation, on all documents requiring action by a consular officer, of stamps furnished by the Department of State.

Although it originally provided for the selection, appointment, and promotion of officers in accordance with a merit and examination system, the act, as passed, did not place consular officers above political influence. This end was, however, in large measure accomplished by an executive order drawn up by Secretary Root and promulgated by President Roosevelt during the same year, June 27, 1906. Consuls-general and consuls of the first seven classes¹ were to be appointed by promotions from the lower grades of the Consular Service and from persons in the service of the State Department with salaries of \$2,000 or more, on the basis of ability and efficiency as shown in these services; appointments to the two lowest grades (8 and 9) were to be made by promotion, partially on the same basis (ability and efficiency), of consular assistants, vice-consuls, deputy consuls, consular agents, student interpreters, and interpreters, but examinations were required prior to the promotions. The examinations were also to be open to candidates who had been "specially designated by the President for appointment to the Consular Service subject to examination." Some of the lower appointees of the service were also required to pass examinations. The executive order, as amended, required "examinations of persons designated for appointment as consular assistant or as student interpreter, and of such persons designated for appointment as vice-consul, deputy consul, and consular agent, as shall desire to become eligible for promotion."

A board of examiners for admission to the consular service, consisting of the Secretary of State (or such officer of the department as the President might designate), the Director of the Consular Service, the Chief of the Consular Bureau, and the Chief Examiner of the Civil Service Commission (or some person whom the commission might designate) was constituted by the order for the purpose of giving and determining the scope of examinations. These are both oral and written, and, in addition, a rigid physical examination is given. The oral test aims to ascertain the existence or non-existence of such important qualifications as resourcefulness, business capacity, judgment, manners, and appearance. The written test covers thoroughly one modern language; international maritime and commercial law; political and commercial geography; arithmetic; natural, industrial, and commercial resources and commerce of the United States; American history, government,

¹Salaries from \$3,000 to \$8,000.

and institutions; modern European, South American, and Far Eastern history; and political economy. A high percentage of failures testifies to the rigor of the requirements. Some of the applicants have been university graduates who have pursued special courses with the service in view, while others have been Government employes whose experience qualified them for the work. The ideal sought to be attained was expressed by President Roosevelt in these, the closing words of the order of 1906: ". . . Neither in the designation for examination nor certification of appointment will the political affiliations of the candidate be considered."

Although in 1912 only one-quarter of the employes¹ in the service had entered following an examination, the effect of the leaven thus introduced was noticeable. Mr. L. R. Freeman, a journalist who made a world tour at the close of the old régime (1904-1907) and a later one after the new order had been firmly established (1910-1912), reports that "the American consul of to-day is a far more useful Government servant than the one of ten years ago."² While the civil service appointees occupy posts confined almost entirely to the three lowest grades of consulates, he found that the consuls in the more important posts were largely "fit survivors of the old régime."

President Taft and Secretary Knox consistently followed the consular policy inaugurated by President Roosevelt and Secretary Root, and early in the administration it was announced that the merit system would be rigidly applied in promotions to the higher grades. Even the London consul-generalship, formerly regarded as a political appointment, was so handled, the Liverpool consul being advanced to this high post. Efficiency records were introduced by Secretary Root, even before the passage of the law in 1906, and promotions were made dependent upon the showing made by consular officers. These records have enabled appointments to be made on a real merit basis. The increased representation of the Southern States in the service was one indication of the non-political tendencies in the making of appointments under the new régime. The executive order of 1906 had stated that, as between candidates of equal merit, appointments were to be so made as to secure proportional representation of all the States and Territories, and the effort to carry out this order appears to have been sincere, for a Southern representation of 51, in 1906, had risen to 103 in 1912, during a Republican administration.

¹ Entered under examinations prescribed in 1895.	81
Entered under examinations prescribed in 1905 and later.	146
(The latter were the more effective examinations.)	
Interpreters.	19
Student interpreters.	22

268

²Freeman, "Trade Scouts who Capture Millions," in *World's Work*, XXVI, 1913, p. 201.

The law and executive order of 1906 together brought about a great improvement of service. Since then the amendments to the law have been only in matters of detail, but they have been directed towards strengthening the act. The law of May 11, 1908, effected a considerable number of changes in the grading of consulates. Some offices regarded as no longer necessary were closed; new ones were opened; the classification of certain underpaid consuls was raised; and in general an effort was made to make the service more nearly correspond to commercial needs. As organized in 1908, except for a change in the location of one consulate, the service has remained unchanged to date (1913).

Provisions for clerical services in consulates have become more and more liberal of late. The appropriation for the service in 1908 increased the number of consular clerks from 13 to 20, and designated them as consular assistants. The number had been increased to 40 in 1913, while the allowance for clerk-hire through the special fund had increased to \$375,000.

In 1909, a Director of the Consular Service was appointed, with a salary of \$4,500, to undertake the general supervision of the service, under the direction of the Secretary of State.

Bills for the reorganization of the Service have been introduced at almost every recent session of Congress, but usually they have not gone beyond the committees to which they were referred. The projects for reform have taken various lines. There is, for instance, a continual demand, due to changing trade routes and commercial conditions, for the disestablishment of existing offices and the creation of new ones. Although the rules of the State Department provide that candidates are not designated for examination with a view to appointment to particular posts, but in order to determine their eligibility for appointment to those posts in which, in the judgment of the Department, their services would best serve the public interests, it is nevertheless true that appointments are made to a place and not to a grade, with resulting inelasticity. Recent proposed legislation has aimed to overcome this inconvenience by providing that appointments should be to grades, so that the President would be empowered, without waiting for the salary appropriation in connection with a specific post, to assign a graded officer to a new position. A change by promotion under the present law requires from one to five years.

An insistent demand has been directed towards the enactment into law of an examination and merit system of appointment, similar to that worked out in executive orders. Until Congress takes this action it remains possible for an executive order to reestablish, in whole or in part, the system that prevailed prior to 1906. With the assurance that promotion was and would remain on the basis, not of political influence but of merit alone, consular officers would be inspired to

renewed diligence. This assurance has not been absolute, even in the recent past, and many consuls have retired because of a conviction that influence which they did not possess was necessary to secure appointment to the more important posts. Proposed legislation has also prohibited consideration of the political affiliations of candidates.

All of these proposals are aimed to conserve the good results achieved by executive orders promulgated as temporary expedients to overcome the deficiencies of legislation. The improvements in the service have remedied many preexisting evils, and consular reform has receded from the lime-light of 1906 to make way for public matters of greater urgency. Although it is more difficult to awaken public sentiment for the maintenance of an advance once achieved than it is to arouse an active opposition to glaring public evils, American trade organizations are not allowing consular questions to pass unnoticed, as is evidenced by the report of the House Committee on Foreign Affairs on the improvement of the foreign service, submitted in 1912.¹

ORGANIZATION AND SUPERVISION OF THE SERVICE IN 1913.

The service as reorganized is outlined by table 81, which states the number of Consuls-General and Consuls by classes and gives the salary paid officials of each class in 1912.²

TABLE 81.—Number by classes and salaries paid United States consuls-general and consuls, 1912.

	No.	Salary.		No.	Salary.
Consuls-General:			Consuls:		
Class I.....	2	\$12,000	Class I.....	1	\$8,000
II.....	6	8,000	II.....	1	6,000
III.....	8	6,000	III.....	9	5,000
IV.....	12	5,500	IV.....	14	4,500
V.....	17	4,500	V.....	22	4,000
VI.....	9	3,500	VI.....	34	3,500
VII.....	3	3,000	VII.....	55	3,000
			VIII.....	60	2,500
			IX.....	45	2,000

In addition to these 16 grades, there are 13 other classes of employees in the service, with the following designations: Consul-general at large, vice and deputy consul-general, vice consul-general, deputy consul-general, vice and deputy consul, vice consul, deputy consul, consular agent, consular assisitant, interpreter, student interpreter, marshal, and clerk.

The varying functions exercised by these officers are scarcely indicated by their titles. To each of the consuls-general at large a definite territory is assigned, and he must visit every consulate within his

¹House Report No. 840, 62 Cong., 2 sess. This report also contains a history of the consular reform movement, sample examination questions, etc.

²*Register of the Department of State*, Oct. 15, 1912, pp. 26-27.

district at least biennially. Consuls-general at large may also be utilized, when the President has reason to believe the business of any consulate is being improperly conducted, to supplant a consul-general or consul for a period of not more than ninety days, during which the official supplanted is under suspension.

Consuls-general are in reality merely consuls with a special title.¹ Ordinarily there is only one consul-general in a country, although there are 8 exceptions to this rule.² The consul-general, when there is one, is usually located in a large city and theoretically has supervision over the consulates located in specified surrounding districts. This supervision, which extends to the enforcement of consular regulations, and is maintained only through the medium of correspondence, is in large measure a nominal one. In the case of 7 consuls-general whose duties are light, economy has dictated a union of diplomatic and consular functions in the same official.

Consuls are much more numerous than officers with the higher title and possess the same powers, except in so far as the latter have jurisdiction over the former. In each of the 47 foreign nations in which there is an American consular officer, an official of the grade of consul is stationed, and in 9 relatively unimportant countries there is no consular officer with a higher title.

Vice consuls-general and vice-consuls are always attached to the office of a consul-general or consul, and in no case have charge of independent offices, except in the absence of their superiors. Their appointment is made by the latter, subject, however, to the approval of the Secretary of State. They have no specified duties to perform and are vested with no powers when the superior officer is at his post. In many places it is difficult to secure American citizens to fill these positions, and although Americans are favored, in the great majority of cases foreigners must be appointed. While no salary attaches to the vice-consular office, when the chief officer is at his post, it is customary to employ these officials as clerks. When the consul-general or consul is obliged to leave his post, the compensation of his subordinate is usually fixed by mutual agreement, and in the absence of an agreement one-half of the officer's salary is paid to the substitute.

Deputy consuls-general and deputy consuls are officers of even less rank, who may perform consular duties, usually of a routine character, either in the presence or absence of their superior, but under his supervision. They are never qualified to take complete charge of an office. They are appointed in the same way as are vice-consular officers, and no special allowance is made for their compensation, but they are usually employed as clerks. At most posts the duties to be performed

¹Van Dyne, *Our Foreign Service*, 130.

²Belgium has 2; China 5; France 2; Germany 6; British Dominions 12; Japan 2; Mexico 2; Turkey 4.

admit of the combination of the vice and deputy functions in a single officer.

Consular agents are stationed at outlying posts, within the various consular districts, and are responsible to the consul-general or consul in charge. With the Government they have no direct relations. Their appointment is made in the same way as that of vice and deputy officers and the same requirement obtains with respect to the appointment of Americans.

The consular assistants, appointed only after examination, and removable only for failure to perform their duties, which are clerical in nature, receive salaries ranging from \$1,000 to \$1,800, depending on length of service.

The interpreters, who are stationed chiefly in Oriental countries,¹ receive salaries ranging from \$800 to \$3,650. Of these, 19 have been promoted from the corps of student interpreters. Of the latter, there are 22, located in China, Japan, and Turkey, who are appointed only after examination and receive a compensation of \$1,000. Both interpreters and student interpreters sometimes also hold minor appointments² in the service, while they are serving as interpreters or carrying on the studies which will eventually fit them for their work. A relatively small number of promotions have been made of consular assistants and interpreters to higher positions.

Marshals serving in China and Turkey are connected with the consular courts maintained in those countries.

The general jurisdiction of the Secretary of State over this force of national "trade scouts" is exercised more specifically by the Director of the Consular Service. The Consular Bureau, with a chief and assistant chief, handles the consular correspondence of an administrative character, while other correspondence is handled through four divisions, each in charge of certain geographical areas. The Division of Information prepares and distributes to the service commercial and other correspondence and documents in connection with foreign relations. Two foreign trade advisers maintain an office, formerly known as the Bureau of Trade Relations, and prepare instructions to consular officers for reports to be printed by the Department of Commerce, revise and transmit such reports, when received, to the latter Department and to other branches of the Government, and compile commercial information for the State Department. The connection with the Bureau of Foreign and Domestic Commerce, in the Department of Commerce, which in the first place makes requests for reports on certain subjects and later publishes the reports received, is maintained in this way, all correspondence with consular officers being handled through the State Department.

¹China, Japan, Siberia, Syria, Korea, Persia, Morocco, Egypt, and Turkey.

²As vice or deputy officers, or as marshals.

The instruction of consuls begins in Washington. Secretary Root, who was a zealous advocate of efficiency in the service, transformed this proceeding from a mere formality into an educational course.

Once at his post, the official is governed by the *Consular Regulations*, first issued by the Department in 1838,¹ and reissued from time to time. "General and Special Consular Instructions" are issued at frequent intervals in the shape of circulars, digests of which have been published. In addition to the direction thus exercised from Washington, consular officers are subject to the "general supervision" of the American ambassador, minister, or chargé d'affaires in the country where they are stationed.

EXTRATERRITORIAL AND OTHER FUNCTIONS OF CONSULS.

Only those functions of consular officers which relate to commercial matters, which indeed are their chief concern, are to be discussed here, and those which represent the earlier conception of the purpose of the service require but brief mention. Consular officers have had, from the earliest times, certain duties with respect to the safety of American citizens either traveling or resident abroad. They are expected to maintain and promote all rightful interests of Americans, affording them such protection as they are by treaty and usage entitled to. At the principal consular offices a register of the American citizens resident in the districts, on the basis of which certificates of registration are issued, facilitates the work of protection. For travelers in certain jurisdictions, passports are issued or viséed.

The extraterritorial functions devolving upon consuls bear a definite relation to the protection of American citizens, and are of great commercial importance. Extraterritoriality is an ancient right, claimed by Christians in non-Christian countries, by virtue of the differences in morals, customs, and institutions between the Christian and non-Christian countries. It involves immunity from the law of the latter in favor of the law of the former, which is controlling as regards persons from Christian countries. Consular courts are the medium for the enforcement of the rights of extraterritoriality. The right, which is granted only by treaty, involves a varying degree of power. The United States has usually sought to secure jurisdiction not only over suits between Americans, but over all suits in which an American citizen is defendant. This jurisdiction includes civil cases and sometimes extends to criminal actions as well. Extraterritorial rights were first secured with the Barbary powers,² when the sole reason for the demand of such rights was the importance of our commerce with those

¹Early instructions were issued at infrequent intervals in the form of circulars, but there was little actual direction of the service. Secretary Livingston, in 1833, issued a short and incomplete set of regulations in an effort to make consular procedure more uniform and the conception of duties more definite.

²Between 1795 and 1836, with Algiers, Tunis, Tripoli, and Morocco.

nations. Subsequently, extraterritorial rights were secured by treaties with a number of other countries,¹ and are still exercised in Borneo, China, Korea, Siam, Turkey,² Persia, Tripoli, Morocco, and Muscat. The judicial functions thus exercised by consular officers necessitate, as indeed the rules of the Board of Examiners now require, that appointees to posts in those Oriental countries where consular courts are held shall be familiar with at least the rudiments of law.

Consular officers are not concerned alone with the laws relating to American citizens abroad, but are also charged with assisting in the enforcement of certain other laws. Of great importance are their duties with respect to the public revenue laws, which relate to the certification of invoices covering merchandise valued at more than \$100 and shipped to the United States. Their duties sometimes also involve the certification of landing certificates, which testify to the entry into foreign countries of goods coming from the United States in bond. The discharge of the bond by the presentation of the landing certificate relieves the payment of duty in the United States. Moreover, returned American merchandise is exempt from duty in the United States, if its character is properly certified to by the consular officer.

Consular officers are also concerned with the enforcement of the immigration laws through their endeavors to prevent the emigration (from the countries where the consuls are stationed) of persons belonging to the excluded classes. When they learn of the emigration of such persons they immediately notify Washington. Medical representatives of the Public Health Service are stationed at various consulates for the inspection of persons departing for the United States.

In connection with the merchant marine, consuls possess important functions. Consuls ship and discharge American seamen, provide relief and transportation for those that are destitute, settle disputes between masters and seamen, investigate charges of insubordination, and send mutineers home for trial. When American vessels are stranded, consular officers render such assistance as they can, and in the absence of the master or other properly qualified person, take charge of wrecks and cargoes, when permitted to do so by law or treaty. In the performance of their duties with respect to the conduct of ships in port and the legal relations of the persons aboard, the consuls are assisted by the law requiring that ships' papers be left with them while vessels are in port.

They protect the health of American seamen and assist in keeping disease from American seaports in two ways: first, by issuing to vessels clearing for the United States bills of health certifying to the condition of the port, vessel, crew, passengers, and cargo, with respect to health and sanitary matters; and second, by making weekly reports of the

¹Turkey (1830); Muscat (1833); China (1844); Borneo (1850); Siam (1856); Persia (1856); Japan (1858); Madagascar (1867); Samoa (1878); Korea (1882); Zanzibar (1886); and Tonga (1886).

²Including mixed courts at Constantinople and Cairo.

sanitary and health conditions of the foreign ports where they are stationed. On the outbreak of any epidemic or of a contagious disease, these reports are made immediately by telegraph or cable.

ACTIVITIES OF CONSULAR SERVICE IN PROMOTING TRADE.

The chief commercial functions of the consul are those relating to the promotion of the foreign trade. Although this aspect of the service is of comparatively recent origin and represents a gradual growth, it has received a more extended development than any other, and is now recognized as by far the most important consular function.¹ The United States was formerly less anxious to follow the example set by England and France and make the American consul an "envoy of trade," because American manufacturers were not interested in the foreign market. Even now the complaint is made that American business men are unappreciative of the possibilities of foreign trade. The consul-general at Birmingham, England, reported² in 1912 that American manufacturers have a reputation, in times of industrial activity, for neglecting foreign markets in two ways: (1) by careless inspection, due to the rush in getting orders out; and (2) by meeting the domestic demand first and pursuing dilatory methods with respect to the foreign trade. A further reason for the failure to utilize American consuls in promoting trade lay in the fact that much of the export trade has consisted in raw materials and agricultural products which readily found a market without the stimulus of consular assistance. That situation has largely changed, and the consular service is measuring up to the consequent demands made upon it.

Trade promotion is facilitated by the collection and compilation of statistical and other data. The statistics which were at first collected did not relate directly to trade and were for the benefit, not of American exporters, but of various government departments, such as the Treasury Department, which required information concerning foreign prices to assist it in the levying of import duties.

Prior to the law of 1856, consuls had been utilized for the collection of commercial information, which appeared in three digests of commercial regulations in foreign ports, and in a series of reports treating of the commercial relations of the United States with foreign countries. The three digests, published in 1819, 1824, and 1833-36, were designed to facilitate the trade thus carried on. The series of reports referred to, although not primarily intended to aid commerce, but rather to get foreign prices for the Customs Service and commercial information which would assist Congress in tariff legislation, developed, however, into the annual volume of *Commercial Relations*, which became a useful publication in the interests of trade promotion. Not until 1842, under

¹Van Dyne, *Our Foreign Service*, 157.

²*Daily Consular and Trade Reports*, IV, 1912, p. 1308.

the secretaryship of Daniel Webster, was a "recognized use"¹ made of the reports of the foreign service in the preparation of this publication. Even after that time the reports of the customs office and foreign and domestic statistical publications continued to be the chief sources from which the volumes were compiled.

Although four volumes were issued, covering the year 1855, the first of the *Commercial Relations* volumes proper was that issued for 1856, pursuant to the reorganization act. One of the four volumes published in 1855 reproduced for the first time the text of the consular reports, which came to occupy more and more space in the volumes thereafter published annually, until, beginning in 1869, they comprised the whole. These reports were at first comparatively ineffective, because the nature of the information to be submitted was left to the discretion of each consular officer. A beginning in the direction of uniformity was made in 1871, and following the issuance of the *Consular Regulations* of 1874, greater emphasis was placed upon reports concerning trade with the United States. There has been a marked change in the character of the volumes since 1890 in the direction of making the avowed object of their publication the provision of such information as would assist American manufacturers and exporters in developing foreign commerce.

The consular reports incorporated in the annual volumes, and in their successors, the monthly and daily reports, involve general reviews of trade conditions in foreign countries, submitted by the chief consular officers in each, and detailed statements of local conditions by officials in charge of smaller districts. These reports indicate what kind of goods the people of the locality want, how shipments should be packed, the demand for American products during the previous year, the reasons why it has not been larger, and the means by which it may be increased. They state, moreover, the general business conditions and furnish statistics of trade with the United States and other countries.

The last annual volume appeared in 1909. The following year, when the Secretary of Commerce and Labor called attention to the fact that the limited edition authorized minimized the usefulness of the report, which he moreover characterized as "little known and comparatively unnoticed by the public," and as being of "doubtful value" in view of the prompt publicity given through the *Daily Consular and Trade Reports*, the implied recommendation was immediately acted upon, and the future publication of the annual volume was ordered to be discontinued.

Until 1879, consular reports were published only in the annual volumes, except that short abstracts were from time to time given to the press. In that year, however, the first of a number of miscellaneous reports was issued, dealing with trade, labor, and industrial conditions

¹Jones, *Consular Service of the United States*, 62.

in Europe. In 1880 the first direct demand made upon the State Department by manufacturers for aid from the Consular Service came from cotton manufacturers, who requested information concerning the foreign market for cotton products. Chambers of commerce forced upon Congress the consideration of a more frequent publication and distribution of consular reports, and during the same year their issuance monthly was authorized. This aroused an increased activity in the State Department, and among the consular officers as well. In 1910, long after daily reports had come into existence, the monthly reports, which contained no other matter than that appearing in the more frequent and more serviceable edition, were discontinued. *Daily Consular and Trade Reports* were first published in January 1898 as a result of a demand for more frequent information on the part of business men. Beginning with the year 1906, the daily reports have contained, under the heading "Foreign Opportunities," information as to the specific wants of foreign buyers which American exporters can immediately make an effort to supply. From 1910 to 1912, the edition grew from 10,000 to 20,000, the limit permitted by law, and the demand was still greater than could be supplied. *Special Consular Reports* are issued from time to time. Suggestive titles of recent publications in this series are: "Winning Foreign Markets, containing suggestions for extension of trade by American manufacturers and exporters," and "Commercial Courts in Europe."

As new opportunities for service in the dissemination of commercial information have presented themselves, a disposition has been shown to measure up to the possibilities. The most efficient informational service now rendered is probably that of the confidential bulletins and circulars, which are sent out only to those business men who have facilities and equipment to perform the service required. The information, distributed only in this confidential way, is often received from abroad by cable and transmitted to American business men with all possible expedition. During the fiscal year 1912, a total of 139 of these bulletins was issued, dealing with a variety of subjects limited only by the demands of trade the world over. The data collected by consular officers are published in still other forms, such as the "Foreign Tariff Notes," "The Tariff Series," "The World Trade Directory," "Packing for Export," and "Factors in Foreign Trade."

In numerous personal ways service to commercial interests is rendered by American consular officers, who may be reached directly through the mails. In their offices they keep lists of the representatives of American firms located in their districts, which enable them to bring together prospective buyers and sellers. Salesmen, moreover, are given personal introductions to the trade abroad. Through conferences with business men, consuls render efficient personal service

while on visits to the United States. A few enterprising consuls have, on their own initiative, exploited American products through the maintenance of reading rooms, information bureaus, and exhibits of samples.

In connection with the expositions and exhibitions which are held from time to time in various countries, consular officers render useful service. Besides extending to American manufacturers an official invitation to participate, these officers furnish specific information as to the rules and regulations governing exhibits.

Thus far the discussion of consular aid to foreign trade has related solely to exports, but in the matter of imports it is also possible for the service to be of assistance. In past years a serious situation developed, which not only diminished the public revenues, but nullified the efforts made by American importers to compete with foreign firms in the home market. Undervaluation frauds were perpetrated, whereby foreign dealers paid but a low customs duty in shipping to their branch houses in the United States, while invoices furnished American buyers bore the actual selling price of the goods and, under an ad valorem duty system, paid a higher import tax. Thus the foreign firm in the United States was able to undersell the American rival dealing in the same goods. A method of detecting undervaluations, which was developed in 1897 by the American consuls in the lace and textile districts of Germany and Switzerland, was subsequently extended to other manufactures, and while revenue frauds still require the attention both of the Customs and the Consular Services, an appreciable improvement has been made through the more efficient conduct of invoice certification. Consular aid to the importing branch of foreign trade is not limited to the prevention of customs frauds. Buyers sent abroad secure the personal assistance of the consul, and the reports which the latter makes inform importers of the industrial conditions in foreign countries and of the products which may be purchased there.

Business men testify to the value of the service rendered by consular officers in many ways. Letters of appreciation addressed to the Departments at Washington, the ever-growing demand for consular reports, editorials in trade journals, action of trade bodies, the demand that the efficient service that has been developed be conserved by the enactment of adequate legislation, all bear witness to the influence which the service has had in the development of the American foreign trade. Consuls can neither create nor maintain trade; they can at most only facilitate it. Their services are particularly effective in the establishment of commercial relations for the first time in a specific line or a new district, but after the beginning is once made the manufacturers' representatives are in a far better position than is the consul to expand the trade thus established. It is obvious that little assistance can be rendered by the service unless there is in the first place a keen desire

on the part of American manufacturers to enter the foreign market, finding expression in effective methods of exploitation.

On the basis of replies which he obtained from a questionnaire sent to representative manufacturing exporters, Dr. Jones concluded that indifference to the foreign trade and the failure of exporters to take advantage of the assistance offered, often evidenced by their employment of foreign commission houses, were factors which limited the aid that could be rendered; but that, on the other hand, "it is shown from conspicuous examples that when the exporter has the determination to enter the foreign market, and is ready to accept the aid of the consuls, great aid can be, and as a rule is, given by these agents." There is every indication that in the decade which has elapsed since this conclusion was reached the efficiency and practical usefulness of the Consular Service have both markedly increased.

CHAPTER XXXIX.

POLICY OF THE UNITED STATES TOWARDS SHIPPING AND SHIP-BUILDING.

Discriminating duties and shipping reciprocity, 295. Provisions of the acts of July 4 and 20, 1789, 296. Provisions of the reciprocity act of 1815, 297; act of 1817, 297; act of 1828, 297. Reciprocity treaties, 298. Discriminating tonnage taxes and customs duties, 299. The reciprocity clause in the act of 1884, 299. Tariff concessions and registry laws, 300. Aid to vessels in the coastwise trade and fisheries, 303. Legislation concerning seamen, 305. Ship subsidies, 1845-1872, 308. Partial revival of ship subsidies, 1865, 310. The ocean mail payment law of 1891, 311. The Navy and American shipping and ship-building, 313. The first iron warship, the *Michigan*, 315. The effects of the Civil War, 315. Decadence of the navy and ship-building after the Civil War, 316. Stimulating effect of Spanish-American War, 316. Summary of American shipping policy, 317.

The shipping policy of a nation can be determined only by an examination of the attitude of the Government towards numerous questions relating to the construction and operation of ships. It seems wise to consider separately the various elements that make up this policy. While the earlier policies will be considered first, no strict chronological treatment can be given, although related elements will be considered in the sequence of their occurrence. The account will end with the correlation of the whole by pointing out the effect of the various governmental activities and laws.

DISCRIMINATING DUTIES AND SHIPPING RECIPROCITY.¹

Shipping questions were among the earliest problems to occupy the attention of the first Congress. The perils of war and the inability of the Government of the Confederation to regulate commerce had caused American shipping to fall "into decay and involved thousands in the utmost distress."² Congress quickly responded to appeals for help. The first provisions in aid of shipping were contained in the tariff act of July 4, 1789, the second act passed by the first Congress, which provided for a discrimination against foreign shipping by giving a reduction in the duties on goods brought to the United States in American ships.³ The colonists had been accustomed to such legislation, for discriminating duties were authorized in most of the colonial charters, and such duties had been utilized even by one colony against another. The system was, moreover, in accord with the mercantile policy of European nations and was regarded as a matter of necessity.

¹See also *infra*, chap. xli, in which this subject is discussed briefly by Dr. Huebner in connection with "Tariff Provisions for the Promotion of the Foreign Trade of the United States."

²American State Papers, *Commerce and Navigation*, I, 6.

³Renninger, *Government Policy in aid of American Shipbuilding* (A thesis, University of Pennsylvania, Philadelphia, 1911).

The tariff of 1789 provided a reduction of 10 per cent in the duties levied on imports, when the goods were brought in American ships, and this principle was retained as a constituent element of American shipping policy for a quarter century. In the tariff of 1794 the form, but not the nature, of the discrimination was changed, when the duties named in the tariff were made applicable to goods imported in American ships, while a 10 per cent increase was provided for commodities arriving in foreign bottoms. In this form, discriminating customs duties have been provided in almost all subsequent tariff laws, although, practically speaking, they have long since ceased to be operative.

The discrimination given the import trade from the Orient was greater. Deprived of the opportunities of commerce with British colonies which they had theretofore enjoyed, American merchants turned to the Orient to trade unrestricted by navigation laws. The first tariff act encouraged this trade by making the duty upon tea (then the principal East India commodity imported into the United States), when brought direct from China or India in American ships, from 6 to 20 cents per pound, while the same tea imported in American ships via Europe was required to pay from 8 to 26 cents and, if in foreign ships, from 15 to 45 cents. Upon all other Oriental products, imported in foreign ships, an ad valorem duty of 12.5 per cent was levied, which was almost double the rate on similar goods imported in American bottoms. These discriminations were sufficient to exclude foreign shipping from the Oriental import trade. Similar provisions were incorporated in tariff laws until as late as 1830. In 1832 teas brought directly from the Orient in American vessels were placed on the free list, and in 1842 a 10 per cent discrimination in the duties was provided against Oriental goods brought in foreign vessels. From 1862 to 1882 a 10 per cent additional duty was levied on eastern cargoes shipped from west of the Cape of Good Hope.

Discrimination of another sort, proposed by James Madison and adopted July 20, 1789, in the third act of the first Congress, involved the tonnage duties levied upon ships arriving at the ports of the United States. A decided preference was given to American shipping, and a considerable preference also to vessels built in the United States but partly owned by foreigners. The tonnage duties were as follows: On vessels built and owned in America and on foreign-built vessels owned by Americans, on and after May 29, 1789, 6 cents; on vessels thereafter built in the United States but partly or wholly owned by foreigners, 30 cents; on all other vessels, 50 cents. Discriminating tonnage duties were continued by the tariff act of March 27, 1804, which placed foreign shipping at an even more serious disadvantage. A new duty, known as "light money," amounting to 50 cents per ton, was authorized to be charged on all foreign ships entering the ports of the United States. This doubled the previous tonnage tax levied on foreign

vessels. Light money was collected, until 1830, since when the light-house service has been maintained from the Treasury funds without a specific tax. The net result of these discriminations was a tremendous growth of the American shipping industry. Both the foreign and coasting trade passed very largely into the hands of Americans, and there was an immediate and rapid growth in the merchant marine.

The treaties which brought peace at the close of the war of 1812 ushered in a new policy which seemed to be a departure in shipping legislation. While it did not immediately result in a decline of shipping interests, it has been designated as a forerunner of the measures to which have been attributed the transfer of the foreign trade from American to foreign bottoms. This policy first appeared in the act of March 3, 1815, which removed discriminating duties, both tonnage and import, in favor of American vessels in the foreign trade, so far as concerned ships carrying goods from the country under whose flag they sailed. The repeal was to take effect with respect to any nation, when its discriminating or countervailing duties which operated to the disadvantage of American shipping had, to the satisfaction of the President, been abolished.

The commercial convention of July 3, 1815, removed the restrictions upon the East India colonial trade, but permitted Great Britain to regulate the West India trade as it saw fit. Reciprocal trade with British countries in Europe was secured, the same tonnage duties on each other's vessels were to be charged, and no discriminating duties in favor of home shipping were to be permitted on imported goods. The treaty went beyond the terms of the act of March 3, 1815, and was a diplomatic victory for England. It permitted British ships to engage in the profitable triangular trade between England, the United States, and the West Indies, whereas American ships continued to be excluded from the British West Indies. Shipping and ship-building activities experienced a setback which aroused Congress to action. British ships sailing from ports from which American ships were excluded were sent out of American ports, but it was only after a prolonged struggle that Great Britain was induced to grant real reciprocity of trade.

The policy introduced by the act of 1815 was continued in that of March 1, 1817, prohibiting the importation into the United States of goods in vessels other than those of the United States and of the producing country, or the country through which they were first shipped; but these restrictions were to apply only to those countries pursuing a similar policy toward the United States. This law, it will be noticed, did not offer reciprocity for the indirect trade, but merely prevented participation in it, even with a payment of discriminating duties, by those nations which applied similar restrictions to the United States.

The reciprocity policy reached its final extension in the act of 1828, providing that all foreign nations that would grant a similar privilege

to the United States should be allowed participation in the indirect trade. British ships might, henceforth, carry French goods to the United States without the payment of discriminating duties, providing American ships were allowed the same privilege as between France and England. The policy of maritime reciprocity was introduced by treaty and by proclamation as well, "upon satisfactory evidence being given to the President of the United States by the government of any foreign nation, that no discriminating duties of tonnage or import are imposed or levied in the ports of the said nation, upon vessels wholly belonging to citizens of the United States, or upon the produce, manufactures or merchandise, imported in the same from the United States, or from any foreign country." Among the different jurisdictions which, between 1816 and 1829, accepted partial reciprocity were Great Britain, Norway-Sweden, France, Holland, Prussia, Hamburg and other German cities, Russia, Algiers, Brazil, and Central America. The policy of complete reciprocity has had only temporary suspensions, designed either to favor particular nations or to secure the removal of restrictions placed upon American vessels.

The real result of the introduction of shipping reciprocity has been a debatable question. The friends of the measure have insisted that what American ships lost of their own carrying trade they gained of the commerce of other nations. While the percentage of the American foreign trade carried in American ships declined from 92.5 in 1826 to 66.5 in 1860, it is nevertheless true that 1860 marks the year of the largest tonnage of American vessels which entered and cleared in the foreign trade of the United States until 1900. The foreign tonnage engaged in this trade jumped from 10 per cent of the total entrances and clearances in 1821 to 23 per cent in 1831. In 1832 it was 29 per cent, which was likewise the figure for 1860. It was not until after the Civil War that the decline in American shipping engaged in foreign trade took place, and although participation in the foreign trade of the United States was allowed to the vessels of other nations, the American shipping industry was by no means demoralized.

Many modern writers, however, criticize the assurance of the early lawmakers which led them to believe that the skill and experience of American ship-builders and seamen would enable the United States, after having abolished all discriminating duties, to induce European powers to do the same. Those who regard the reciprocity policy as a real cause of the decline of the American foreign carrying trade still urge a return to the policy of the early days of the Republic. The effort to reestablish the discriminations which were a heritage from the days of the Cromwellian "Navigation Laws" has, however, been fruitless. Long before the development of the spirit of international comity, practically all nations had adopted shipping reciprocity, which is looked upon as one of the contributions of American statesmen to the present

commercial system of the world. When the possibility of reprisals and the necessity of abrogating all commercial treaties now in force are considered, it is apparent that, as Mr. E. T. Chamberlain, Commissioner of Navigation,¹ says, a readoption of the old policy of discriminating duties is "hopelessly impracticable." The wisdom of his judgment is substantiated by recent experience.

The tariff of 1913 attempted a return to the earliest form of discrimination by providing a 5 per cent discount of the duties established, if goods were imported in ships of American registry. It was stipulated, however, that nothing in this provision was to "be so construed as to abrogate or in any manner impair or affect the provisions" of any existing treaty. Upon the advice of the Attorney-General, the Treasury Department ruled that this provision was inoperative, because the discount could not be given without impairing the treaty rights of other nations.

While tonnage taxes, like customs duties, are now levied on the same basis upon ships of all nations engaged in the foreign trade, they have been so modified as to encourage foreign commerce. The act of May 31, 1830, had repealed these taxes, not only as to American ships, but also as to the vessels of all nations which the President was satisfied had abolished their discriminating or countervailing duties with respect to the United States. The need of revenue caused a re-establishment of tonnage taxes on all vessels in 1862. Changes were made in the rates from time to time, and in 1870 they were removed as to vessels in the American coasting trade and fisheries. In 1884 and 1886 the existing rate of 30 cents per ton net register per year, levied on all vessels in the foreign trade, was changed to 6 cents for each entry, with a maximum payment of 30 cents per ton per year. In the nearby foreign trade—from North America, Central America, the West Indies, the Bahamas, and the Caribbean coast of South America—the rate was to be 3 cents per ton, with a maximum of 15 cents per year. American sailing-vessels had been discriminated against under the old law because they paid the same tax as steamships, although they were not able to make so many trips annually as steamships. The tariff of 1909 granted further relief to the nearby foreign trade by reducing the rate to 2 cents per ton per entry, with a maximum of 10 cents per year.

The law of 1884 contained a reciprocity clause which is a further indication of the liberal international policy of the United States. The President was authorized to "suspend the collection of so much of the duty herein imposed, on vessels entered from any foreign port, as may be in excess of the tonnage and lighthouse duties, or other equivalent tax or taxes, imposed in said port on American vessels by the government of the foreign country in which such port is situated." This clause bore little fruit, vessels from the Netherlands, the Dutch East

¹*Report of U. S. Commissioner of Navigation, 1909, p. 65.*

Indies, Copenhagen, Panama, Colombia, and Ontario being the only ones which, in 1909, came within its provisions. A few other, mostly unimportant, jurisdictions had at various times received reciprocal treatment under the law. For a while vessels from Germany were exempted from the tax, which was, however, reimposed because of charges levied in German ports. As the Commissioner of Navigation pointed out in his reports from year to year, the bargain which was offered by the United States was a one-sided one, in view of the fact that American vessels have been carrying, in recent years, only about 10 per cent of the nation's foreign trade. If Great Britain had abolished its lighthouse dues, when this reciprocal provision was in effect, the United States would have lost over \$300,000 a year in tonnage taxes, while American shipping would have benefited to the extent of barely \$8,000. The reciprocal tonnage-tax exemption was, however, abolished by the tariff of 1909.

The low tonnage duties thus levied upon vessels in the foreign trade are the only taxes now placed upon shipping by the United States Government, which has not only encouraged shipping in this way, but has steadfastly refused to permit the various States to place such impediments as license or tonnage taxes upon interstate and foreign shipping. The States are permitted, however, to tax ships as property belonging to their citizens.

TARIFF CONCESSIONS AND REGISTRY LAWS.

National legislation has since 1870 also encouraged ship-building by tariff concessions on foreign materials used in the industry. Such legislation was first enacted in the post-bellum period, when the business of American ship-builders was suffering great depression. The tariff of 1872 allowed the free importation of materials for building and equipping wooden vessels which were to engage in the foreign trade and in the trade between the Atlantic and Pacific ports of the United States, but the inhibition placed upon engaging in the coastwise trade (except between the Atlantic and Pacific coasts), for more than two months in any one year, made the concession practically valueless. Americans investing capital in sea-going vessels, even when they contemplated engaging in the foreign trade, kept in mind the possibility of falling back upon the coastwise trade and did not care to be bound down by the free importation restrictions. The same tariff also provided that all foreign articles designed for the repair of American ships engaged exclusively in the foreign trade, of which there were comparatively few, were to be admitted duty free. This legislation was the forerunner of more liberal concessions. In 1884 a drawback was given of the duties paid on American-built ships which are subsequently exported, the United States, however, retaining 10 per cent of the drawback. The McKinley tariff of 1890 extended the free importation

provisions to iron and steel ships. The restriction upon engaging in the coastwise trade, however, continued to make these concessions of little practical value until 1909, when the time for participating in the coastwise trade was increased to six months, in accordance with the recommendation made in 1905 by the Merchant Marine Commission. The Panama Canal act of 1912 completely removed the restriction, carrying to completion the policy inaugurated forty years before.

Legislation providing for the registration, enrollment, or licensing of American ships has been designed for the encouragement of the ship-building industry. By the law of September 1, 1789, registration for the foreign trade was confined to vessels built and owned in the United States, and officered by American citizens, an exception being made in favor of foreign-built ships which belonged to American citizens on and after May 15, 1789. Enrollment was provided for vessels in the coasting trade and fisheries and, beginning in 1793, vessels of under 20 tons burden, so engaged, were "licensed." An amendatory act, passed in 1792, admitted to registry, under the same conditions, vessels captured in war by Americans and lawfully condemned as prizes, or forfeited for a breach of the laws of the United States. This legislation contained the essential features of the registry policy followed for a century and a quarter, viz, that the American flag was to fly over those vessels only which had been built in the United States and were owned by its citizens.

By a law passed in 1852, American registry was opened to vessels that had been wrecked on the coast and had undergone repairs in American ports amounting to three-quarters of their value. The facts that the law was ambiguous and that repairs so extensive as those contemplated would ordinarily have to be made in the United States, regardless of the offer of American registry, were responsible for the withdrawal of the privilege in 1906. The law had been utilized, although not to any considerable extent, every year since its passage. The tonnage so admitted, between 1898 and 1906, was greater than in any previous period of like duration, but never reached higher in any one year than it did in 1898, when the total addition was 14,304 tons.

After the Civil War, Congress was pressed to lessen the requirements of the registry laws. During the war the northern fishing fleets had been almost driven from the seas by southern privateers, and ships engaged in the foreign trade had been transferred to foreign registry to escape the fate which befell the fishing vessels, or sold at panic prices to foreigners. A total tonnage of 774,652 (between one-quarter and one-third of the total registered tonnage of 1861) was sold abroad from 1862 to 1865. Although urged to do so, Congress refused to readmit to American registry such shipping as southern privateers had forced into the merchant marine of foreign nations. It was urged that "to allow citizens to avail themselves of all the advantages conferred

by our Government during peace, and escape all the risks of supporting it during war, by placing their property at such times under the protection of a foreign flag, would be a dangerous precedent to establish."¹ Exceptions to this policy were made, however, by special acts readmitting some of the alienated tonnage.

Moreover, in a similar way, from time to time, the privilege of American registry was extended to a considerable tonnage of foreign-built ships. This practice began on a small scale in 1824, and the highest tonnage ever admitted in any one year before the Civil War was 4,607 in 1859. Thereafter the average yearly tonnage admitted was larger than before the war, but the high figure of 1859 was not again reached until 1890. The practice achieved particularly large results at the time of the Spanish-American war. From 1898 to 1901 a total tonnage of 103,302 was admitted by special acts, which, however, is largely explained by the nationalization of Porto Rican and Hawaiian vessels.

A considerable tonnage has been renationalized under the act of March 3, 1897, which readmitted to American registry vessels sold to foreigners and subsequently transferred to citizens of the United States, providing that, in the meantime, there had been no enlargement of the vessel or change of build outside of the United States. This act was another indication of the tendency to remove the restrictions upon American registry.

Subsequent to the Civil War there was an agitation for a general modification of the registry laws with respect to ships of foreign construction. The advocates of "free ships" argued that Americans should not be denied the privilege of securing in the English yards up-to-date ships which could be bought for at least one-third less than the cost of construction in the United States. They hoped thereby to build up the shipping industry and thus, eventually, to create a demand for the output of American shipyards. They were opposed, however, by the ship-building interest, which had its way until 1912, when, in the Panama Canal act, admission to American registry, for participation in the foreign trade and in the trade with the Philippines, Guam, and Tutuila, was granted to vessels not more than five years old and constructed abroad, owned entirely in the United States. The agitation for free ships was successful in 1912, when the Secretary of Commerce and Labor urged the passage of the bill on the ground that a merchant marine was of the utmost importance to the United States and that it was futile to hope for its construction in American yards without greater subsidies. Congress being unwilling to extend the subsidy policy, he pointed to the undesirability of longer doing without a merchant marine in the vain hope that the concomitant advantage of American construction might also be enjoyed. The "free ship" law

¹House Report No. 28, 41 Cong., 2 sess., I, p. xi, *Report of the Lynch Committee on Causes of the Reduction of American Tonnage.*

was designed to improve the American merchant marine by the addition of modern foreign-built steamships. The five-year age limit was provided, in order to prevent the transfer to American registry of old steamers, which foreign owners might readily dispose of, in order to secure more efficient and modern craft.

The repeal of the provision that foreign-built vessels admitted to American registry must not be more than five years old was recommended by the Secretary of Commerce in March 1914, but the bill giving effect to the recommendation was not passed by Congress until after the outbreak of the European War. The law of August 18, 1914, "though passed under stress of war, was, in fact, an inevitable development in the change of national policy which under ordinary conditions would have been effected as soon as Congress could have turned its attention to the subject."¹ Between August 18 and November 5, 1914, a total of 80 ships, with a gross tonnage of 278,374, took advantage of the provision. The President was authorized to, and did, suspend until September 4, 1916, the requirements as to survey, inspection, and measurement of foreign-built vessels admitted to American registry.

Although Porto Rican and Hawaiian vessels were admitted to the American merchant marine, the Philippine vessels were treated somewhat differently. Foreign vessels have always been permitted to engage in the trade between the United States and the Philippine Islands. Under the act of April 15, 1904, the coastwise restrictions were not to be applied to trade between Philippine ports until Congress authorized the registry of vessels owned by the inhabitants of the islands, and the Government of the islands was authorized to adopt and enforce regulations for the transportation of merchandise and passengers between ports in the archipelago.

While the American registry laws still restrict the privilege of flying the American flag to vessels owned by "citizens of the United States or a corporation organized under the laws of any of the States thereof," there is no prohibition upon the ownership abroad of shares in corporations, which have practically supplanted individuals in the control of transportation on the sea as well as on the land. "The requirement of American ownership," it has been pointed out, "is thus no real restriction upon the development of our shipping."²

AID TO VESSELS IN THE COASTWISE TRADE AND FISHERIES.

The American coastwise trade, as is true of the coasting trade of many other maritime nations, is reserved to national shipping. The earliest registry laws did not confine the coasting trade to the vessels of the United States, but the privilege which foreign ships possessed of

¹*Report of U. S. Commissioner of Navigation, 1914, p. 30.*

²*Ibid.*, 1909, p. 59.

engaging therein was of doubtful value, because of the heavy discriminating tonnage taxes and "light duties." Tonnage taxes were, under the early laws, levied but once a year on American vessels engaged in the coastwise trade, while foreign vessels which sought to enter this trade had to make a higher payment, and at every entry. There were no tonnage duties on vessels engaged in the coasting trade from 1830 to 1862, and those established in 1862 were repealed in 1870.

When Congress, by the adoption of a policy of maritime reciprocity, lessened the restrictions on the foreign trade, it tightened the grasp which American shipowners already had on the coastwise trade by adopting, in 1817, a prohibition, which has ever since remained, against the participation of foreigners therein. A similar prohibition, enacted in 1808, had been repealed the following year. The policy of restricting this trade not only to American shipping, but to American-built ships, has been so far amended as to permit foreign materials to be imported free of duty for use in building ships for the coastwise trade. The "free-ship" acts of 1912 and 1914 do not, however, apply to vessels in the coasting trade.

The reservation of the coasting trade to American ships has been the mainstay of the merchant marine and the ship-building industry of the United States since the Civil War. In the years before the Civil War the shipping engaged in the domestic trade was by no means unimportant. In 1815 the enrolled tonnage in the domestic trade was about five-eighths of that engaged in the foreign trade; but before many years the enrolled and licensed vessels exceeded the registered vessels in tonnage. In 1861, the banner year in the annals of American shipping in the foreign trade, the domestic tonnage exceeded the foreign by about 10 per cent. Conditions have changed materially since then. In 1913 the registered tonnage was less than one-sixth of that engaged in the coastwise trade.

The coastwise trade is expanding as a result of the opening of the Panama Canal, which has brought the two coasts nearer each other and made it possible for water lines to compete more extensively with rail carriers for intercoastal traffic. Railroad ownership of vessels operating through the canal was absolutely forbidden, and after July 1, 1914, railroad control of competing water carriers was prohibited, except when the Interstate Commerce Commission is of the opinion that existing railroad-owned steamship service "is being operated in the interest of the public and is of advantage to the convenience and commerce of the people, and that such extension (of time during which the service may be continued) will neither exclude, prevent, nor reduce competition on the route by water under consideration."

Of the American fisheries, which are considered elsewhere in this volume, little need be said here. In the early maritime system of the United States they were of fundamental importance, not only because of the tonnage involved and the lucrativeness of the employment, but

also because of the demands which they made of ship-builders and the training which they afforded for the development of seamen for the merchant marine and the navy. Congress recognized this importance, first by drawbacks on the duties paid on salt used in curing fish, and later, in 1792 and 1794, by bounties, to be divided between ship-owners and fishermen. In 1817, after the bounties had begun to be large in amount, a law was passed for the purpose of confining their benefits more definitely to American citizens. Thereafter the officers and at least three-fourths of the crews of fishing-vessels were required to be Americans.

The bounties were repealed in 1866, when the tonnage engaged in the fisheries had suffered a severe decline due to the perils of war and to the demand made by the navy for seamen. The tonnage engaged in the fisheries was greater in 1862 than ever before or after. While the decline of the fisheries is not attributable solely to the discontinuance of the bounties, that has been regarded as one of the contributory causes.¹ The salt drawback was again resorted to in 1866, but it did not greatly encourage the fisheries, and it is now an unimportant item. The tonnage-tax provisions relating to the coasting trade were applied to vessels in the fisheries, which thus paid lower tonnage taxes than did ships in the foreign trade in the early days. Since 1870 there have been no tonnage taxes on vessels in the fisheries and the coasting trade.

LEGISLATION CONCERNING SEAMEN.

The Federal Government has always extended to seamen a degree of protection commensurate with the trying conditions under which they labor. The very first law on the subject, "An act for the government and regulation of seamen in the merchant service," approved July 20, 1790, constituted an advance over the practice of other nations at that time and established the main principles of American policy. It provided that written agreements between masters and mariners should be drawn up, before the sailing of the ship, covering the length of service and the voyages to be made; that if the mate and the majority of the crew should decide, while on a voyage, that the vessel had become so leaky as to be unable to complete its voyage the captain must put in to port to have an inquiry made in court as to the necessity of remedying the alleged defect; that mariners were entitled to demand and receive their wages at specified times and places; that medical chests should be carried on ships bound to foreign lands; that vessels bound across the Atlantic should "have on board, well secured under deck, 60 gallons of water, 120 pounds of salted flesh meat, and 100 pounds of wholesome shipbread" for every member of the crew, "and in like proportion for shorter or longer voyages."

In the years that followed there were frequent additions and amendments to this law, designed to improve the conditions of employment

¹Marvin, *The American Merchant Marine*, 308.

aboard merchantmen. In 1792 the return to the United States of destitute seamen was provided for. During the first half of the nineteenth century, when foreign trade was participated in to a large extent by American ships, a number of acts were passed relative to the discharge of seamen abroad and the payment of wages in such cases. Corporal punishment aboard merchant ships was abolished in 1850.

A wholesale revision of the legislation relating to seamen was made in 1872. The scale of provisions to be furnished was enlarged and was required to be specified in the shipping articles; and a room for the protection of seamen from the cold was required to be provided. In accordance with British practice, shipping commissioners were provided for. The shipping commissioner was to provide an agency "where the master needing a crew and the seamen seeking a berth meet and make their contracts under the supervision of an officer of the Government, appointed for the protection of the seaman."¹ The law did not provide for an office for the use of the shipping commissioner, at Government expense, and his place of business became in practice a place of last resort, while middlemen really got the crews together. This not only involved an unnecessary cost but failed to prevent impositions on the seamen by boarding-house keepers and unscrupulous persons. However, in 1886, offices were provided in Federal buildings, wherever any vacant rooms were to be found, and the service of the commissioner further improved by the substitution of salaries for the fees which had theretofore been collected. Offices were finally provided at all points and at Government expense in 1897, so that the work of the commissioners was placed on a more satisfactory basis. Commissioners are located at all the principal ports, and contracts between seamen and masters are signed in their presence. A register of all seamen presenting themselves is kept by the commissioners, who furnish aid in securing employment, adjust disputes between masters, owners, and seamen and enforce laws respecting allotments and "shanghaiing." The American consul affords protection at foreign ports in a similar way. Although it is still possible for those on shore to secure a large part of the seamen's wages before they are earned, the men who follow the sea have benefited materially from the fact that a place is provided where, under Government protection, they may "secure employment and make contracts without the interposition of outside parties interested in securing, directly or indirectly, a fee from master or seamen, or both."

The tax formerly paid by seamen for the maintenance of a hospital service was removed in 1884, the funds thereafter being supplied for a while by the tonnage taxes and later by appropriations from funds in the treasury.

¹*Report of U. S. Commissioner of Navigation, 1895, p. 27.*

Between the years 1895 and 1898, material improvements were made in the laws relative to seamen. The Frye law of 1895 first dealt with the question of the space provided for crews, and, as amended in 1897, required as a minimum 72 cubic feet of crew space per man and 12 square feet on the deck. Sailing vessels built after 1897 were to provide 100 cubic feet of crew space with 16 square feet on deck. These quarters were to be properly lighted, heated, ventilated, and drained. At that time, these fore-castle accommodations were superior to those stipulated by other nations. Improvements in conditions were, however, made at a later date by the laws of foreign countries.

In the seamen's act, approved March 4, 1915, Congress provided for 120 cubic feet of crew space with 16 square feet on the deck in vessels thereafter constructed. The law of 1915 also provided for a hospital compartment on ships undertaking voyages of more than three days. Far-reaching provisions, designed to improve the conditions of labor at sea, contained in the same act, relate to the maintenance of watches, and the granting of holidays when in port. Not less than 75 per cent of the men, in each department of vessels of 100 tons and upward, navigating elsewhere than on rivers and smaller inland lakes, must be able to understand any order given by the officers of the vessel. Additional provisions were made for life-saving appliances. Payment of advance wages was prohibited. The minimum scale of provisions for seamen, which had been raised in 1898, was improved by the law of 1915 with respect to certain allowances as to provisions. "It has been the theory of our Government that the conditions of living on board American ships ought to be superior to those on foreign vessels, just as the standard of living among American laborers is higher than among foreign workingmen."¹ The act of March 4, 1915, however, so increased the cost of operating American vessels and so increased the difficulty of the successful competition of American with foreign vessels as to start a propaganda for the repeal or amendment of the law.

From 1813 to 1864 restrictions were placed on the employment of foreigners on American ships, but in the latter year, as a necessary measure for the maintenance of the merchant marine, the restrictions were removed. Thereafter American ship-owners, except as restricted by the ocean-mail-pay act of 1891, were at liberty to employ foreign seamen, the only requirement as to American citizenship being that applying to the master and all watch officers, including pilots. By the executive order of September 14, 1914, under the act of August 18 of that year, alien officers on foreign ships admitted to registry may serve until September 4, 1921, and vacancies may be filled, regardless of citizenship, until September 4, 1916. For many years the percentage of American seamen on American ships has been slightly under 50 per cent. The naturalization laws with respect to seamen permit the

¹Johnson, *Ocean and Inland Water Transportation*, 262.

admission to citizenship of foreigners having previously made a declaration of their intention to become citizens, after three years of creditable service on an American merchant vessel. One-third of the seamen in the merchant marine of the United States who, in 1913, enjoyed the privileges of citizenship were naturalized Americans and were thus qualified for promotion to the position of watch officers. The salaries of officers on American ships are higher than the salaries of those on ships of other nations.

SHIP SUBSIDIES, 1845 TO 1872.

The fishing bounties were the natural forerunner of, and were used as an argument for, a ship-subsidy policy which had long been advocated, but was not adopted until 1845, when the introduction of steam threatened American shipping prestige. As long as vessels were built of wood and did not require machinery for their operation, the natural advantages enjoyed by American ship-builders were such that the industry was not in danger. When these conditions changed, statesmen pointed to the success of the government-aided lines which had grown up in Great Britain and France,¹ and when England, in 1839, granted a mail subsidy to the line which began operations to the United States in the following year as the Cunard Line, Congress was aroused to the importance of meeting a new species of competition. American merchantmen had previously maintained their prestige without subventions, but it was then recognized that encouragement would have to be given if steamships were to be built to meet modern competitive conditions. Even the speedy "clipper ships," introduced about 1845, were unable to compete with the new creation of the ship-builder's art. The bill which became a law on March 3, 1845, provided for ship subsidies through payments for mail carriage in excess of the value of the service rendered. The Postmaster General was authorized to contract with American owners of American vessels, preferably steamships, for the carriage both of foreign and of domestic mail. Rates of pay were stated in terms of the weight and classification of the pieces of mail carried, and in each case the inland postage was added to the compensation. Upon the payment of a fair amount the Government was given the right to take over the ships in which the mail was carried for use as war vessels.

The liberal rates offered did not bring about the establishment of any new lines, and Congress was obliged to go beyond the original policy of compensation. An appropriation of \$25,000 was made in 1846 towards the establishment of a line of mail steamers to Bremen, and a contract was entered into the following year for service to Havre and Bremen via Cowes. This first mail-subsidy contract provided for the payment of \$100,000 annually for each ship making the trip from

¹*Debates of Congress*, XV, 563.

New York to Bremen and return once every two months. For the Havre service the subsidy was \$75,000 per annum. Four first-class steamships were to be built within a year, pursuant to these contracts, and the line was to operate its ships "with greater speed to the distance than is performed by the Cunard Line between Boston and Liverpool and back." These arrangements resulted in the establishment of an irregular service to Bremen in 1847 and of the full service contemplated to both Bremen and Havre in 1851.

Meanwhile Congress extended the cash-subsidy policy to other lines. An act approved March 3, 1847, accepted proposals for mail carriage between New York and Liverpool, via the Collins Line, and between New York and New Orleans. The contract made with the Collins Line in 1847 provided that a New York-Liverpool service, started in 1850, was to be performed by five steamers receiving a total of \$385,000 (it was \$758,000 from 1852 to 1856) annually. There were also contracts for a New Orleans service, via Charleston, Savannah, and Havana, with additional service from Havana to Chagres, by five steamers receiving \$290,000 annually; and for an Oregon service, connecting at Panama with the line from New York to Chagres, and with stops at San Diego, Monterey, and San Francisco, by three steamers of the newly established Pacific Mail Steamship Company, receiving \$199,000 annually. A separate Charleston-Havana service was later established pursuant to the same act, involving a single steamer which made stops at Savannah and Key West, and received \$50,000 annually. Although the Postmaster General received proposals for the establishment of services to other countries, they were not accepted. The authorized subsidies were increased in some cases, however, and additional service required of the lines already established.

A combination of adverse circumstances brought a sudden end to the subsidy system. Ship-owners and ship-builders in the United States were unable to compete successfully with the British in the construction and operation of iron steamships. Despite indefatigable efforts, Americans soon found that economic conditions, which had formerly favored them, now aided British shipping. Coal and iron were indispensable, even in the operation of wooden steamships, of which the machinery was a vital part. In the cost of engines, as well as in the supply of labor, England had the advantage. Other economic factors limited American success in the keen competition of the seas. Foreign markets were more of a necessity to England than to the United States. Moreover, "England's need of ocean mail service and her ability to pay subsidies to maintain English ships were greater than the need and ability of the United States."¹

Certain political considerations also contributed to the success of the British and the failure of the American subsidy policy. The British

¹Meeker, *History of Shipping Subsidies*, 153.

colonial possessions necessitated the maintenance, under the British flag, of fast and numerous steamship lines, not only across the North Atlantic, where Americans sought to gain a foothold, but in every other ocean. The owners of American sailing-vessels were opposed to the preferential treatment accorded steamships, and this was not without its influence politically. Moreover, the Congressional debates preceding the withdrawal of the subsidies gave evidences of the growing conflict between the North and the South, the agricultural interests of the South being opposed to the extension of Federal aid to the commercial interests of the North. Accidents contributed to the downfall of ship subsidies. The loss at sea within two years (1854-56) of two high-class Collins steamers was a greater shock than the line could bear. Its traffic fell off and it was unable to maintain its schedules or to fulfill its contract with the Government. Although the Collins vessels were more luxurious and faster than the Cunard ships, the conditions as to speed and length of time in port interfered with their handling of freight cargoes. The failure of the Collins Line had much to do with the termination of subsidies.

The Senate Committee on the Post Office and Post Roads proposed the payment to American vessels of the sea and inland postage, and no more, for ocean mail transportation, arguing that this would be a sufficient inducement for the maintenance of an adequate European service. Notwithstanding the danger to the American merchant marine involved in the procedure, which was pointed out by Senator William H. Seward and others, the subsidies were withdrawn, and the payment to steamers of the ocean and inland postage substituted, in the "mail-steamer bill" of June 14, 1858. It was provided, however, that American ships were to be preferred, in selecting means of mail transportation, although the rates paid to them were to be higher, inasmuch as foreign ships were to receive only the sea postage.

The subsidies which had involved payments of approximately \$14,000,000,¹ were not without beneficial results. They had assisted the merchant marine during the early years of a trying period; they had caused the construction of several modern steamships, and had brought about the establishment of important lines. That they did not achieve more is partly due to the lack of continuity in policy. Unfortunately, their withdrawal came at the time they were most needed, at the beginning of the great decline in the American mercantile marine.

¹Dr. Meeker's figures, p. 156, reduced to tabular form, make the following showing:

Line.	Period of operation.	Approximate subsidy.	Line.	Period of operation.	Approximate subsidy.
Bremen.....	1847-57	\$2,000,000	Panama.....	1848-58	\$2,900,000
Havre.....	1852-57	750,000	Pacific Mail....	1848-58	3,375,000
Collins.....	1850-58	4,500,000	Havana.....	1848-58	500,000

A temporary and half-hearted subsidy revival, instituted in 1865, did not accomplish much. One steamship line operated a monthly service from 1865 to 1876 between Philadelphia and Rio de Janeiro, receiving annually from the United States \$150,000 and from Brazil \$100,000; the Pacific Mail Line maintained a monthly service to Japan and China, receiving \$500,000 annually; while for service to the Sandwich Islands \$75,000 was paid annually. An additional monthly China and Japan service, carrying a \$500,000 subsidy, was authorized in 1872, but canceled two years later, when it was shown that a large sum of money had been spent to secure the passage of the bill. When the ten-year term of the other Oriental contract expired, it was impossible to overcome the opposition to its renewal that had developed because of the corruption alleged to have been attendant upon the passage of the act of 1872. The Hawaiian service was given up in 1873.

Many other subsidy proposals were made but failed of passage, and those which were accepted did not accomplish the beneficial results expected of them. The United States did not capture Brazilian trade from Great Britain, nor did commerce with China and Japan appear to have been affected by the Oriental subventions. The temper of Congress is illustrated by the reception given the proposal of the ship-builder, John Roach, when, in 1879, he attempted to secure a subsidy for a new Brazilian line. Senator Wadleigh, of New Hampshire, argued that mail subsidies have a tendency to destroy home competitors, that the public was opposed to them because they were always given only to rich and powerful men, that they were an encouragement to bribery, that they had not in the past increased trade, and finally, that the specific Brazilian subsidy sought was unnecessary to enable the line to operate profitably.¹ "What is a subsidy?" he asked. "It is taking from the public treasury an amount of money wrung by taxation from the people for public purposes, and giving it to an individual upon the assumption that his business will benefit in some way the public, if it is successful."

THE OCEAN MAIL PAYMENT LAW OF 1891.

Following a prolonged agitation, a mail payment law, which was the first one of a general nature to be adopted by the United States, was secured in 1891. This law, which is still in operation, unlike its predecessors, does not call for the establishment of specific lines, but provides that the Postmaster General may make contracts, running from five to ten years, for the transportation of the mails to foreign countries upon steamers registered under the laws of the United States, officered by American citizens, and manned by crews at least half of whom, after the first five years of the contract, must likewise be Americans. The

¹*Cong. Record*, 45 Cong., 3 sess., 1646.

classification adopted and remuneration authorized are specified in table 82.

The compensation varies according to a classification based on the speed and tonnage of the steamer employed, and the Postmaster General specifies the number of voyages required annually and the class of vessel to be used, except that mail to Great Britain must be handled in steamships of the first class. Vessels of the first three classes (2,500 tons or over), built after the passage of the act, are to "be constructed with particular reference to prompt and economic conversion into auxiliary naval cruisers, and according to plans and specifications to be agreed upon by and between the owners and the Secretary of the Navy." All vessels previously built, in order to qualify for mail contracts, must be approved by the Secretary of the Navy as suitable for the services in which they are to be employed. All of these steamers may be taken and used by the United States as transports or cruisers upon the payment of fair compensation.

TABLE 82.—*Classification of vessels and compensation allowed by mail payment act of 1891.*¹

Class.	Minimum gross register.	Material used in construction.	Speed.	Maximum compensation.
	<i>tons.</i>		<i>knots.</i>	
First.....	8,000	Iron or steel..	20	\$4 per mile, shortest practicable route for outward voyage.
Second....	5,000	.....do.....	16	\$2 per mile, shortest practicable route for outward voyage.
Third.....	2,500	.....do.....	14	\$1 per mile, shortest practicable route for outward voyage.
Fourth....	1,500	Iron, steel, or wood.	12	\$0.66½ per mile for actual number of miles required by the Post Office Dept. to be traveled on each outward-bound voyage.

The law attempts to provide for the training of American boys for the merchant marine by requiring that vessels employed in the foreign mail service shall "take, as cadets or apprentices, one American-born boy under 21 years of age for each 1,000 tons gross register and one for each majority fraction thereof, who shall be educated in the duties of seamanship, rank as petty officers, and receive such pay for their services as may be reasonable."

The results of this law were disappointing. While proposals were called for covering more than 50 ocean mail routes, only 11 contracts were entered into, providing for service to Venezuela (two lines), Panama (two lines), Japan and China, England, France and Belgium, the Argentine Republic, Brazil, Cuba, and Mexico. In order to provide ships necessary to make the service measure up to the terms of the contracts as to speed and frequency, the Postmaster General stated in 1892 that an expenditure of \$14,000,000 would have to be made by the contractors.

A special act, in 1892, admitted to American registry two new British-built vessels for the American Line, in order to permit them to receive trans-atlantic mail subsidies, and required the construction of two similar ships in American yards. The result was the construction of the *St. Louis* and *St. Paul*, not only the largest and most modern merchant ships built up to that time in this country, but then the best appointed and fastest afloat.

The ocean mail act of 1891, however, failed to accomplish important results in the way of encouraging shipping or ship-building, largely because the compensation offered was not proportionate to the service demanded. By 1893, three of the eleven routes originally established had been discontinued, and up to 1898 no lines had contracted to perform services on the Pacific.

Immediately following the Spanish-American war, there was a concerted effort to secure an extension of the law, and in anticipation of the probable passage of a subsidy bill in 1899, 18 large steamships were constructed. The law, however, failed of passage, and the futility of the effort to secure increased mail subventions was generally recognized. The Merchant Marine Commission of 1904 recommended both general bounties to all shipping and the subsidizing of steamers over ten specified routes, in addition to those established under the act of 1891. Rates of compensation high enough to attract capital to the various enterprises were proposed, but Congress refused to act.

The payments for mail services have done but little as a stimulus to the merchant marine. The number of routes operated decreased until, at the close of the fiscal year 1913, there were only six.¹ The excess cost of the contract service over what would have been paid in the ordinary course was only \$157,818.28.

The provisions of the Panama Canal act, which amended the mail-contract law of 1891 to the extent of permitting foreign-built ships, subsequently Americanized, if in their construction and operation the provisions of the law of 1891 are complied with, to receive contract rates for carrying the mails, had not been availed of up to November 1914.

THE NAVY AND AMERICAN SHIP-BUILDING.

The American Navy has had a far-reaching influence on shipping interests through the protection it has afforded the merchant marine, both in time of war and of peace. The construction of modern men-of-war has, moreover, afforded opportunity for the development of a capable body of naval architects and ship-builders, and for the construction and maintenance of shipyards where both public and private vessels of the most advanced type may be built.

¹First class: New York to Southampton, England; second class: San Francisco to Sydney, Australia; third class: New York to Vera Cruz, Mexico, and New York to Puerto Cabello, Venezuela; fourth class: New York to Maracaibo, Venezuela, and Boston and Philadelphia to Port Antonio, Jamaica.

Early but reluctant and sporadic attention was given to the development of the Navy to protect the important merchant marine. The depredations of the Barbary pirates first demanded the reestablishment of a navy which had been disbanded, because the Confederation had no financial means for its support. Complications which arose with France hastened naval preparations, and in 1798 American warships were authorized to attack French cruisers. Together with privateers, the Navy carried on a successful war which was scarcely terminated, by a treaty negotiated in 1800, when the trouble with the corsairs broke out anew. A reenforced fleet humbled the pirates and brought about the peace of 1805, which freed American commerce for some time from the predatory attacks in the Mediterranean.

A more serious interference with commerce was that occasioned by the policy of Great Britain during the Napoleonic wars. Beginning in 1804, American merchantmen were searched and in many cases captured, seamen were impressed, and American ports unofficially blockaded. When the Navy proved ineffective in protecting the merchant marine, temporary embargo was placed upon shipping that compelled all American vessels to remain in port. The embargo authorized in 1807 was designed to operate so unfavorably against England that a satisfactory commercial treaty might be negotiated. It proved to be a complete failure, and in 1809 was supplanted by a non-intercourse act, prohibiting the vessels of France and England from entering American ports. During the war of 1812 the embargo was again adopted. Combined with the predatory tactics of France and the seizure of war prizes by England, it operated to drive the American merchant marine from the seas. After Great Britain had succeeded in bottling up the inadequate American Navy, speedy privateers were almost the only craft which sailed the seas, flying the American flag. Following the peace of 1814, a final and successful expedition to Algiers was carried out.

During the early years of American history no consistent naval policy was followed. When shipping was endangered by the hostile action of foreign powers, Congress responded to public demands by creating a naval force to cope with the situation. Such a method of procedure, however, always involved considerable losses before effective protection, if any, could be afforded. The general practice of the Government, of building its ships in its own yards, did not enable it to contribute directly to the encouragement of ship-building in any material way. During the War of 1812, however, contracts for naval vessels were placed with private yards and craft constructed under private auspices were sometimes purchased. Indirectly, moreover, Government naval construction contributed to the development of the ship-building industry, through the purchase of large quantities of materials, and the demand for ships' supplies and equipment.

Until the Mexican War, the country enjoyed peace. The Navy was employed in the suppression of slave-trading and piracy and in making voyages of exploration, whereby its assistance to shipping interests was continued. The Mexican conflict involved the merchant marine in very little danger and such naval action as was called for was principally in connection with joint operations with the army. The Perry expedition to the Orient, 1852-55, resulted in the opening of the ports of Japan, and illustrated the possibilities of utilizing the navy as an emissary of peaceful commercial development.

The losses suffered during the War of 1812 appear to have had a salutary effect, for a constructive plan for the gradual increase of the Navy, adopted in 1816, with the approval of both political parties, was consistently pursued. A greater recourse to private shipyards was necessitated by the adoption of steam-vessels for naval purposes. Robert Fulton designed the first of these, which was placed in service in 1815. The United States was slow, however, to develop a strong steam navy. It was necessary to resort more to private contractors following the introduction of iron warships, the first of which, the *Michigan*, was launched on the Great Lakes in 1844. Thereafter the construction of iron steamships for war service, many of which were of an experimental nature, continued slowly. Opportunities lost in the Mexican War, "simply for lack of motive power more reliable than the winds, served as excellent object lessons to direct naval and public attention to the necessity of having a fleet of steam war-vessels,"¹ and contributed to the adoption and extension of the mail-subsidy policy. The subsidized vessels were constructed under naval supervision and were subject to purchase for war purposes. In 1860 the steam navy consisted of 34 vessels. The impetus given by naval demands to construction during these years contributed directly to the great prosperity enjoyed by the shipyards. "Some of the most eminent of the American ship-builders were members of the naval construction corps,"² and a direct effort was made "to invite a healthful rivalry between naval constructors and civilian ship-builders by committing the building of some of the ships entirely to private enterprise." In such cases, navy engineers were detailed to superintend the work of construction. The machinery, however, was almost always manufactured outside of the Government yards, and the heavy demand for marine engines resulted in the establishment of a number of private plants.

During the Civil War ship-building was given a temporary stimulus by the necessity which the Government was under of obtaining ships to maintain the blockade of southern ports, cope with privateers, carry on naval warfare, and cooperate in army maneuvers. Of the entire work of building vessels and engines for the Navy during the war, 84.5 per cent was done in private yards. The Secretary of the Navy,

¹Bennett, *The Steam Navy of the United States*, I, 102.

²*Ibid.*, 142.

in his report for 1864, credited "the exigencies of the times and the necessities of war" with having "stimulated the inventive faculties of our countrymen to vast improvements in vessels, in engines," etc. The superiority of iron ships was clearly demonstrated during the war.

While the Civil War stimulated the growth of the ship-building industry and resulted in an improved and modernized equipment of shipyards, peace brought a disastrous decline. For twenty years the American Navy was neglected, and the shipyards failed to receive even the moderate impetus afforded by naval construction during the years prior to the war, under the influence of which they had been built up.

When the navy had fallen to a pitifully low ebb, and "repairs were no longer possible, for space for more patches was lacking upon almost every ship of ours then afloat,"¹ a naval policy was adopted which has aided the development of the ship-building industry. The first provision for the new navy was made in 1882, when the superiority of steel over iron was recognized. The delay was thus productive of some benefit, in that the construction of iron ships was in the main avoided. Progress was at first slow and considerable experimentation had to be undertaken. Almost all of the construction was done under private auspices. Shipyards on both coasts profited by the demand for a strong navy, but by far the greatest tonnage and the majority of the most important ships came from the yard of William Cramp and Sons, of Philadelphia, although the Union Iron Works, of San Francisco, and the Newport News Steamboat and Dry Dock Company were also awarded important contracts. The upbuilding of the Navy during this period is credited with having virtually started the steel ship-building industry of the country. Dr. Crowell presents an able summary of the effects of the national naval policy upon ship-building when he says:²

"The policy of the Government in building up a navy has created a condition favorable to the increase of commercial tonnage, rather than acted as the cause of this increase. Building of warships created plants prepared to turn out merchant ships. Between that and the actual building of a merchant marine lies a not very deep gulf, which progress in the iron and steel industries of the United States has gradually been filling up."

An entirely new era in naval history, ushered in by the Spanish-American War, had an immediately favorable effect upon the ship-building industry.

In 1898 Congress appropriated \$50,000,000 for national defense, and within a few months 102 vessels had been purchased, most of which had to be replaced by construction in American shipyards.

¹Bennett, *The Steam Navy of the United States*, II, 772.

²"Shipping Industry of the United States; its Relation to the Foreign Trade," in *Monthly Summary of Commerce and Finance*, Dec. 1900, p. 1391.

The building of battleships and other war craft received so great a stimulus that, beginning in 1901, the tonnage of Government vessels far exceeded that of merchant vessels building at the seaboard. During several years, since 1901, the Government tonnage has been more than half the total construction, lake and seaboard combined. In 1912 the navy, as augmented by this construction work, consisted of an actual fighting force of 166 vessels, including 33 battleships. Practically all of the new vessels have been built at private shipyards, "principally because these industries should be encouraged, and the Government can thus profit by their experience and resources; and also because ordinarily the work is done more economically than at navy yards."¹ Not only in construction, but in the making of repairs as well, have private shipyards profited by the liberal appropriations of recent years.

SUMMARY.

The history of American shipping policy presents great variations in the attitude of the Federal Government towards the merchant marine. In the early days of the Republic, when shipping interests were of great importance, an ultra-protective policy was adopted which was relaxed only after American shipowners enjoyed the greatest carrying trade in the world, and when American ship-builders were without a peer anywhere. It was then that the statesmen of the Republic introduced a liberal policy of reciprocal treatment with respect to tariff and tonnage duties, which has since been adopted throughout the world. The opening of American ports to foreign vessels on a basis of equality did not undermine the merchant marine; nor did any other governmental policy. The decline began only when economic advantages in ship-building were acquired by Great Britain, due to the change of materials employed in construction. A more favorable British policy provided an encouragement which, temporarily at least, appeared to give to British shipping interests a large part of the carrying trade formerly enjoyed by Americans. But no governmental policy could have stayed the forces which were at work to bring about the downfall of American shipping.

The Civil War dealt the merchant marine a severe blow, and Congress has been criticized for its failure to meet the crisis by the adoption of remedial legislation. The tremendous expansion of the United States, which involved the opening up of the West by transcontinental railroads and the development of manufactures, attracted American interests from the seas and concentrated them upon home problems. There was no surplus population seeking employment elsewhere than at home, but on the contrary there was a demand for more labor at home, which resulted in a tremendous influx of immigration. Manu-

¹*Report of the U. S. Secretary of the Navy, 1909, p. 20.*

factures required no foreign market, and only in recent years has an interest therein been awakened. There was thus in this country a general apathy toward foreign commerce and the carrying trade not shared by nations like England, which had colonies all over the world with which a constant, active connection had to be maintained, nor by other nations with manufacturing interests seeking an outlet abroad. So it is not surprising that Congress did not act, that it never adopted a successful shipping policy, that it failed to stay the decline in the merchant marine which followed the Civil War.

The times have changed since 1890. The one-time "infant" industries of the United States have risen to a position where they can supply the home market and in addition compete for markets abroad. Foreign trade can be carried on more successfully when served by an ample tonnage of vessels operated under the national flag from the principal American ports to all the commercially important countries. The ships of foreign nations, especially the vessels which are operated in regular lines over established routes, are operated primarily for the convenience of home shippers, whose interests the vessel-owners prefer to develop. American exporters need more lines of American ships for the transportation of their commodities.

The "free ship" laws of 1912 and 1914 are an indication that the old apathy towards shipping interests is giving way. It was in the Panama Canal act that this concession to shipping interests was first made, and the Panama Canal itself is serving to reawaken a public interest in shipping questions generally.

The policy of protection for American shipping and ship-building adopted at the very outset—the reservation of the coastwise trade to American bottoms—still remains and is likely to be retained. It is mainly responsible for the American merchant marine of to-day and, together with the naval policy of the United States, for the American ship-building industry as it now exists. The Panama Canal, through the extension and connection of the American coast-line, will increase ship-building. There are, moreover, indications in the growth of the steel industry and lowered costs of production that the United States may eventually be able to compete with foreign builders in the construction of steel ships.

All of these factors—the extension of national boundaries, the demand for foreign markets, the disadvantage to commerce of depending upon the merchant marine of business rivals, the opening of the Panama Canal, and the growing advantages enjoyed by American ship-builders, promise to increase the maritime prominence of the United States.

CHAPTER XL.

IMPROVEMENT OF RIVERS AND HARBORS AND REGULATION OF WATERWAYS.

The first period of river and harbor improvement, 1789-1823, 319. Gallatin's plan, 1808, 320. River and harbor legislation from 1823 to the Civil War, 321. Objections of President Jackson to Federal aid for internal improvements, 1830, 321. Causes of opposition to Federal aid and to internal improvements from 1830 to 1860, 322. From the Civil War to 1900, 323. Controversies over river and harbor legislation, 324. Waterway policy from 1900 to 1912, 325. The National Rivers and Harbors Congress, 326. Investigations and reports by the Inland Waterways Commission and the National Waterways Commission, 1907-1912, 326. Betterment of methods and agencies of making improvements, 328. Adoption by Congress of the "continuing contract" system, 1890, 329. Measures for prevention of floods, 330. Development of water-power by Federal Government, 331. Federal regulation of waterways, 331. Power over carriers by water vested in the Interstate Commerce Commission by the act of 1887, 332. Provisions of the Panama Canal act of 1912 regarding carriers by water, 333.

Few phases of governmental policy have given rise to so many questions of constitutionality and political expediency as has the improvement by the Federal Government of rivers and harbors. "Internal improvements" probably rank second only to the tariff among the economic questions to which public attention was directed during the first century of the national life of the United States.

THE FIRST PERIOD OF RIVER AND HARBOR IMPROVEMENTS, 1789-1823.

The first period of the improvement of harbors and inland waterways extended from 1789 to 1823, during which time the works were carried on largely by the State governments. At the outset the States, in conformity with colonial practice, took entire charge of such works of improvement as were necessary, and there was considerable hesitancy about delegating these functions to the Federal Government. The first evidence of a view that the control over interstate and foreign commerce given to the National Government by the Constitution entailed financial responsibility for the improvement and maintenance of water facilities is to be seen in the act passed in 1789, providing for the support, maintenance, and repair for one year of light-houses, beacons, buoys, and public piers by the United States. Provision for the continuance of this assistance was made conditional upon the transference of title to the facilities in question to the United States. Although the States did not immediately cede to the National Government the eight light-houses then in existence, Congressional appropriations continued to be made for their maintenance, and subsequent legislation included the "stakeage of channels on the sea coast" among the facilities for which the Federal Government undertook to assume responsibility. Thereafter appropriations were sometimes made for

the construction of aids to navigation at dangerous places along the coast. The first Government-built light-house was erected under an authorization by Congress in 1789, and in 1802 an appropriation was made for the repair and erection of public piers on a site to be owned by the United States Government, in the Delaware River.¹ These piers had previously been erected at various points in the river for the protection of vessels navigating the river in stormy weather.

Though the direct activities of the Federal Government in the work of improving rivers and harbors were at first confined to projects involving such facilities as light-houses and piers, over which the rights of ownership could be exercised, yet means were employed whereby the National Government could indirectly lend assistance in the prosecution of works undertaken by the individual States. This consisted in the enactment of laws permitting State governments to levy tonnage taxes, a power which, according to the Constitution, no State shall exercise except with the consent of Congress. Partly for the maintenance of the facilities which had been taken over by the Federal Government, the States had formerly collected tonnage taxes, and were permitted to continue doing so, the funds raised being devoted to the improvement and maintenance of rivers and harbors. State plans for improvement were submitted to Congress, and in 34 instances authorizations were given to levy tonnage taxes on shipping.

As the conception of a more centralized National Government gained strength, the inhabitants of the country west of the Allegheny Mountains insisted that the tonnage taxes which the seaboard States were allowed to levy for the establishment of transportation facilities should be supplemented by national assistance in the construction of turn-pikes and canals connecting the seaboard with the West. An appropriation of \$30,000 for the Cumberland Road was secured in 1806, and two years later Albert Gallatin, Secretary of the Treasury, drew up the first scheme for a comprehensive system of internal improvements to be constructed by the National Government. Undertakings of this nature had been favored by such influential statesmen as Washington, Hamilton, and Jefferson, who prepared the way for the new conception of Federal responsibility, and Gallatin's plan was looked upon generally with favor, but unfortunately the complications which led eventually to the War of 1812 arose to prevent the taking of any action on his scheme.

After the close of the war the agitation for internal improvements was renewed, but the policy of National improvement of the transportation system of the country was not adopted without opposition. President Madison, in 1817, vetoed the bill appropriating the bonus received for the charter of the Second Bank of the United States to the construction of roads and canals, because he did not believe that

¹*Laws of the U. S. Relating to the Improvement of Rivers and Harbors* (Senate Misc. Doc. No. 91, 49 Cong., 2 sess., p. 8).

the Federal Government could constitutionally engage in works of internal improvements within the States. Although President Monroe shared this view, towards the close of his administration he so far overcame his constitutional scruples as to assert the right of Congress to raise money and to appropriate it at their discretion, "restricted only by their duty to appropriate it to purposes of common defense and of general, not local, national, not state, benefit."

RIVER AND HARBOR LEGISLATION FROM 1823 TO THE CIVIL WAR.

On March 3, 1823, Congress passed the first river and harbor act.¹ In this act the first appropriation for an improvement in the nature of "clearing harbors" was made, and the following year a beginning of river improvements was authorized, when \$75,000 was voted for the removal of various sand-bars, as well as "planters, sawyers or snags" from the Mississippi River. In 1824, moreover, a bill was passed, allowing \$30,000 for the making of surveys, plans, and estimates covering road and canal routes deemed by the President to be of national importance. Officers of the Army Corps of Engineers, which had been established in 1802, were to be employed in this work. In the same year (1824) the first Federal land grants were made in aid of canals, and the following year the first Federal subscriptions were made to canal companies.

The United States Government had, by 1825, fairly entered upon the first period of real activity in the making of waterway improvements. The men in Congress who contributed most to the success of this movement were Calhoun, Clay, and especially John Quincy Adams, who became President in 1825. During his administration total appropriations of \$1,294,266.23 were made for rivers and harbors. Clay was the most zealous of all the advocates of Federal action, the essential features of his "American System" being a protective tariff and extensive internal improvements—policies of equal importance in his scheme for the advancement of the economic welfare of the nation.

Calhoun soon became a party to the growing opposition to the system of national improvements, concluding that there was no constitutional authority for Federal prosecution of such works, and this was the view held by President Jackson, who in 1830, by his veto of a bill authorizing a subscription to stock in the Maysville and Lexington turnpike road in Kentucky, put an end for the time being to the direct appropriation of funds for internal improvements. Jackson objected to the bill on the ground that its character was local, and that it was, therefore, unconstitutional; and, even for the prosecution of national works of improvement, he regarded a constitutional amendment necessary. Except as to roads and canals, he was unable to enforce

¹The appropriation contained in the act of May 7, 1822, for the construction of three piers near the mouth of Delaware Bay to serve as sea-walls, has sometimes been looked upon as a "harbor improvement" act in the modern sense. It really belongs, however, to the earlier period, providing as it did that the sites for the proposed improvements should be ceded to the United States.

his views upon Congress, which adopted the expedient of enacting legislation for river and harbor improvements as riders to appropriation bills. Sometimes the annual allowances made in this way were relatively large, ranging during President Jackson's administration from \$300,000 to \$1,000,000. President Van Buren was more thoroughly a strict constructionist than his predecessor was, and his constitutional views, together with more potent influences which are now to be considered, brought to a sudden halt the appropriation of liberal sums for waterway improvements, not, however, until after Congress, in 1838, had voted a sum of \$1,512,194.53, which was the largest appropriation made for rivers and harbors until 1867, except in the year 1853.

The main causes of the reversal in policy were the following:¹

The distribution in 1836 of the surplus which the National Government had acquired from the tariff duties and more especially from the sale of western lands resulted in a reduction of the Treasury surplus to a point where it was no longer practicable for the Federal Government to make internal improvements. The results of distribution were, moreover, inimical to the prosecution of such works by any public agency, for "wildcat" banking schemes, together with widespread financial disaster in 1837, attached an odium to internal improvements which were the real object of distribution. President Tyler's veto, in 1842, of the tariff bill which provided for distributing among the States any surplus that might result from its operation, for the purpose, among others, of carrying on internal improvements, put an end to the agitation for the distribution of the Federal revenues.

The operation of the "tariff of abominations" (1828), which Clay had linked with his plans for Federal improvements to form the "American System," was so unpopular as to bring the whole "system" temporarily into disrepute.

The introduction of the railroad (in 1830), and the demonstration during the succeeding decade of its practicability as a means of transportation, lessened the enthusiasm for the construction of roads and canals and the improvement of rivers, and constituted the strongest reason for the abandonment of such projects by the Federal Government.

The improvement of rivers and harbors became a party issue. The "strict constructionist" Democratic party was in the ascendancy through most of the subsequent thirty years.

Finally, war expenses incurred in the struggle with Mexico and in the Civil War put a quietus on projects involving waterway improvements. A river and harbor bill did, however, get as far as President Polk, during the Mexican War, only to be vetoed. Similar legislation was also vetoed by Presidents Tyler and Pierce.

¹Johnson, "River and Harbor Bills," in *Annals of American Academy of Political and Social Science*, 1892, II, 788.

During the period of Federal inactivity, extending roughly from 1839 to 1866, such river and harbor appropriations as were made were accomplished mainly by indirect methods, a favorite device being to incorporate them in appropriation bills under the heading "fortifications, etc." Federal aid continued, however, to be given to some extent to such projects through the grant of public lands to the States, a popular method during the years when internal improvements were opposed as direct Federal undertakings. As late as 1868 a grant of land was made to the State of Minnesota to aid in the improvement of the navigation of the Mississippi River.

FROM THE CIVIL WAR TO 1900.

The Civil War brought a great change in the conception of the functions to be performed by the Federal Government, and the revival of interest in national works of waterway improvement after the firm establishment of peace is not surprising. The first act making an appropriation was passed June 28, 1864, and carried \$250,000 for harbor and \$100,000 for river improvements. It was followed by a similar act, in 1866, making a larger appropriation and constituting the beginning of a series of annual bills carrying grants for the improvement of rivers and harbors. The acts of 1866 and 1867 were passed within the same fiscal year, and brought the total appropriations for the year 1867 up to \$8,777,329.61, which was much in excess of any previous Congressional allowance for similar purposes. It was, however, in 1869, when an appropriation of \$2,000,000 was made, that the policy was inaugurated which has since prevailed, of making regular grants at from one to three year intervals, for rivers and harbors. Except for the year 1877, the bills were annual until 1882, when the biennial plan was adopted. In 1910 the plan of making annual appropriations was again adopted.

The report of the Select Committee on Transportation Routes to the Seaboard, commonly known as the Windom Committee, which was submitted to the Senate in 1874, stated clearly the view then entertained by Congress with respect to the power of the Federal Government to appropriate funds for the improvement of waterways. In the summary of its conclusions and recommendations, the majority stated in its report:

"The power 'to regulate commerce' includes the power to *aid* and *facilitate* it by the employment of such means as may be appropriate and plainly adapted to that end; and hence Congress may, in its discretion, improve, or create, channels of commerce on land, or by water."¹

Appropriation bills for river and harbor projects became popular with Congressmen; but in his fifth annual message, that of December 1, 1873, President Grant condemned "appropriations for river and

¹Senate Report, No. 307, 43 Cong., 1 sess., III, parts I and II. Excerpt quoted in *Preliminary Report of Inland Waterways Commission*, 583.

harbor improvement in those localities where the improvements are of but little benefit to general commerce. . . ."¹

In 1876, in a special message, President Grant stated:

"If it was obligatory upon the Executive to expend all the money appropriated by Congress, I should return the river and harbor bill with my objections, notwithstanding the great inconvenience to the public interests resulting therefrom and the loss of expenditures from previous Congresses upon incompleting works. Without enumerating, many appropriations are made for works of purely private or local interest, in no sense national. I can not give my sanction to these, and will take care that during my term of office no public money shall be expended upon them."²

The insistence of President Grant upon the prosecution of only those works which were national in character was unavailing in the face of the legislative practice of the time. Each Congressman was eager for an appropriation for his own district or State. President Arthur was opposed to the practice of appropriations making grants for a multitude of scattered works, and vetoed the act of 1882, but the act was passed over his veto. At least a portion of the public agreed with the President, and many Congressmen who voted to pass the act of 1882 over the President's veto lost their seats, and thereafter, until 1896, the appropriations became biennial.

The character of the works authorized and the considerations which entered into the passage of the bills during a period when river and harbor legislation was passed with such readiness, are stated by Alexander Johnston, who wrote in 1883:

"In such a mass of appropriations it is impossible that there should not be very many objects well worth the care of the National Government; but, with every allowance, the amount of absolute plunder in the total must have been enormous. In debating one of these bills a member of Congress declared from personal knowledge that one 'river,' for which an appropriation had been inserted, could be fitted for commerce only by being paved or macadamized; and this instance was certainly not an isolated one . . . In fact, most of these appropriations are not for the public interest at all, but for the personal interests of the legislators, for the reelection of a Congressman often depends upon his success in 'bringing money into the district' through the river and harbor bill, or the erection of public buildings."³

Although facts such as these were well known, and river and harbor improvements were the subject of a widespread and acrimonious discussion, Congress continued to make appropriations which were large because of the great number of works authorized and undertaken. The biennial bill passed in 1896 carried over \$70,000,000, which was more than any single river and harbor act had ever before appropriated. However, the growing effect of the criticism of such legislation is to be seen

¹*Messages and Papers of the Presidents*, VII, 243.

²*Ibid.*, 377.

³Lalor (ed.), *Cyclopedia of Political Science, Political Economy and of the Political History of the United States*, II, 572.

in the fact that from 1896 to 1905 bills were passed at three-year intervals instead of biennially. As the chairman of the House Committee on Rivers and Harbors stated, public opinion was coming to exercise "a despotic force in this country," which was more than the old system, or lack of system, in waterway improvements could stand.

WATERWAY POLICY FROM 1900 TO 1912.

About the beginning of the century a transition may be noted to a more systematic policy regarding the prosecution of Federal works, the purpose being to place the improvement of rivers and harbors on a more scientific basis. Writing in 1892, Prof. Emory R. Johnson pointed out the course which waterway improvements were to take during this period, when he said:¹

"The change demanded by the facts lies in the direction neither of no expenditure nor of less expenditure, but in the direction of more expenditure in a wiser manner, a manner in which the public money shall be more scientifically expended on works fewer in number and more strictly national in character."

A number of reasons may be adduced to account for the ultimate success of the agitation for a reform in the methods of waterway improvements. Not only in the unmistakable opposition to waterway projects from certain quarters, but in the positive demand for them from others, may be seen a reason for a change in methods. A demand for attention came with peculiar force from important seaboard cities. The increased draft of modern ocean-going vessels made it impossible for them to load to full capacity in many ports. In 1907, moreover, heavy crops and exceptional prosperity resulted in an abnormal rail traffic and a serious freight-car shortage, giving rise to the belief that the railways had "broken down." Although a freight-car surplus larger than the previous car shortage followed the panic of 1907, and the railways did not have a car shortage for some years thereafter, the events of 1907 were not without results, because they called attention to the possibilities of improving the navigable streams of the country, in order that they might serve as supplementary transportation agencies for the relief of congestion. President Roosevelt, believing that "river regulation is rate regulation," advocated the development of "streams as highways to the fullest extent which is genuinely profitable" as a means to prevent excessive freight rates. This focusing of attention upon river navigation had the effect of inaugurating inquiries into the best methods of waterway improvement.

A movement which started about 1907 and which influenced waterway policy was that directed towards the conservation of natural resources. This movement at first related to forests alone, but when

¹"River and Harbor Bills," in *Annals of American Academy of Political and Social Science*, 1892, II, 811.

public interests were seen to demand greater waterway utilization, with respect both to navigation and to power development, one of the questions which commanded attention was the relation between forest preservation and stream flow. Thus the waterways were linked with the forests to inaugurate a large conservation movement, which demanded a complete utilization of waterway resources for the public benefit.

Various agencies contributed to the concentration of public attention upon the waterway problem. In one class may be grouped the thirty or more congresses and associations organized in different localities in recent years for the purpose of securing Federal aid for projects of waterway improvement. In order to unite the efforts of such agencies, the National Rivers and Harbors Congress was organized in 1901 with a membership comprising individuals, corporations, commercial bodies, and waterway associations. While this Congress has not supplanted the smaller associations, for it advocates no particular project, but a definite policy whereby every waterway which its members consider worth improving will receive prompt and adequate attention, it has been able to secure greater public interest in the propositions for which it stands than could the associations organized to further particular objects. The slogan of the Waterways Congress since 1906 has been: a Federal appropriation each year of at least \$50,000,000 for river and harbor improvements.

Two National commissions, appointed to make inquiries into the question, have also directed public attention to waterway policy. The first of these, the Inland Waterways Commission, appointed in 1907 by President Roosevelt, was designed to recommend legislation dealing in a comprehensive manner with the whole question. The Commission submitted, February 3, 1908, a preliminary report,¹ making the following recommendations: (1) That plans for improving navigability should take into consideration all uses to be derived from the control of waterways (flood control, land reclamation, water-power development, etc.); (2) that local cooperation should be secured in meeting the costs of improvement; (3) that the plans adopted should contemplate the correlation of rail and water facilities; (4) that harmonious and complementary relations between railways and waterways should be assured; (5) that statistical data should be gathered regarding inland water traffic; (6) that data should be compiled concerning the physical character of streams; (7) that due attention should be paid to the conservation of water resources; (8) that waterways should be improved at the rate required by public needs, to which end the Commission advocated (a) expert framing of a definite policy, (b) certainty of continuity, and (c) expert initiative in the choice of projects and in the order of their undertaking; (9) that a permanent national

¹Senate Doc. No. 325, 60 Cong., 1 sess. XVII, p. 25.

waterways commission be established to bring into coordination the various Governmental agencies involved in waterway control and utilization, and to recommend to Congress plans for improvements, taking into consideration all the uses to which waterways are adaptable.

While the Inland Waterways Commission did not live to continue its investigations itself, its work was not unavailing. Out of its labors grew the call for the assemblage, in 1908, of the first White House conference of governors, and other eminent men, for the consideration of conservation, which temporarily became a national movement. The commission's work was also effective in another way. Although the efforts made in Congress to continue its existence were unsuccessful, yet in 1909, in the National Waterways Commission, a substitute was provided which, in a period of two and one-half years, made a scientific investigation of the whole waterway question, both at home and abroad, and submitted reports which embody the essential features of a scientific policy of improvement. The commission presented its conclusions upon such fundamental questions as the advisability of undertaking waterway improvements at all. Even in the face of diminishing river traffic, a continuation of river improvements was urged, because of the economy in transporting by water heavy freight moving long distances. It was pointed out that the minimum of power and equipment is required, and that, inasmuch as it is relatively easy to engage in water transportation, competition is encouraged and monopoly restricted. The commission undertook to show why promised advantages had not accrued to the public as a result of former works of improvement, it pointed out the evils which had been a part of the waterway policy of the past, and recommended a policy for the future. The chief evils cited were unfair railway competition, inadequate public control of the relations between railways and waterways, Governmental delays in prosecuting projected works, failure of business interests to make complete utilization of the facilities provided, and inadequate terminals. To meet these and other difficulties which had stood in the way of a more complete waterway utilization in the past, the commission recommended:

First, greater cooperation on the part of the railways with the waterways. The commission pointed out that unfair competition, such as the temporary reduction of rates for the purpose of driving river boats out of the business, must be stopped; and that real cooperation should be secured by requiring the establishment of through routes via rail and water lines, the quotation of joint rates, the issuance of through bills of lading, and the installation of physical connections between the two classes of transportation lines. As the best means to the accomplishment of these various ends it recommended, in addition to the passage of adequate legislation, that the Interstate Commerce Commission be given control over water carriers.

In the second place, public control—State or municipal—of water terminals. The commission believed that Federal appropriations, both for river and harbor improvements, should be conditioned upon the assurance that sufficient public terminals would be available at reasonable charges for use by all who desired to use the waterway.

In the third place, the broader problem of stream control and utilization for all purposes was given careful consideration. While adhering to the view that Federal waterway improvements should be undertaken with the primary purpose of improving the navigability of streams, the commission felt that "the time has already come, especially in the more thickly settled river valleys, when a stream must be considered with a view both to minimizing its harmful influences and to securing the maximum benefit from all its uses."¹

BETTERMENT OF METHODS AND AGENCIES OF MAKING IMPROVEMENTS.

The National Waterways Commission's work gave direction to public sentiment and enabled it to bring pressure to bear upon Congress for action along definite lines. Before the commission's labors were begun, however, the Federal Government had commenced to deal more efficiently with waterway improvements. In 1902 the Board of Engineers for Rivers and Harbors was established. Previously reports were made to Congress upon a multitude of projects without a review of the work as a whole by a single board of engineers. The aggregate cost of the improvements recommended in 1902, including those under way and those not begun, would have been \$400,000,000, and Congress was at a loss to know upon which of these undertakings to begin work. It was hoped that through the creation of a board of engineer officers greater uniformity might be secured in recommendations and reports concerning projects, and, moreover, that the advisability of the further prosecution of questionable existing projects might be investigated.²

While this was the first attempt to establish a single advisory board to deal with all of the works of improvement throughout the country, such a method of procedure had previously been adopted with respect to specific localities. Since early in 1879 the Mississippi River Commission has had charge of preparing plans for improving the navigability of the Mississippi River and preventing destructive floods. A Missouri River Commission existed from 1884 to 1902. A similar body, the California Débris Commission, was established in 1893 to adopt plans to improve the navigability of the Sacramento and San Joaquin River systems, which were to be restored "as near as practicable, and the necessities of commerce demand," to the condition existing before they were filled with debris as a result of hydraulic mining operations. Congress has often created special boards to report

¹*Final Report of National Waterways Commission*, 27. Senate Report No. 469, 62 Cong., 2 sess.

²House Doc. No. 795, 57 Cong., 1 sess., IV, p. 3.

upon particular projects. Instances of this were the boards appointed in 1902, 1905, and 1910 to consider the feasibility of a ship waterway connecting the Great Lakes with the Mississippi River and the Gulf, and to report upon the problem of maintaining the level of the Great Lakes after the diversion of water from Lake Michigan through a waterway to the Mississippi River. There is a permanent International Waterways Commission that has control of the use of the waters of the Great Lakes for power and other purposes.

The National Waterways Commission found that Congress, with rare exceptions, was adhering to the policy of undertaking no project that had not received the approval of both the Board of Engineers for Rivers and Harbors and the Chief of Engineers. The commission stated, moreover, that the recommendations of the army engineers have been indorsed, even in the face of occasional strong local opposition. This was a great improvement over past practice.

Efforts have been made in recent years to increase the efficiency of the Engineer Corps of the Army. In 1902, Congress authorized the creation of an engineer post and school at the Washington Barracks, which affords very necessary training, in view of the fact that the small size of the corps necessitates the assumption of heavy responsibilities by young officers. In 1911, Congress provided for increasing by 60 officers the size of the corps, which for a number of years had remained stationary at 188.

In the river and harbor act of 1890 Congress adopted for the largest improvements the "continuing contract" system. The entire amount estimated to be needed for a given project is authorized at the time of the first appropriation; but only such funds as are necessary for current work are made immediately available. Thereafter, from year to year, in the sundry civil bill or the river and harbor bill such additional funds are voted as are needed. This plan insures the completion of approved works and tends to prevent extensive delays due to a lack of funds incident to the failure of Congress to pass river and harbor bills frequently enough to keep the work in continuous progress. This system has been followed for some appropriations contained in all river and harbor acts since 1890, with the exception of that passed in 1894. However, since the inauguration, in 1909, of annual appropriation bills, decreasing provision has been made for continuing contracts which, in 1913, were applied only to the Hudson and Ohio Rivers.

In 1910 Congress fixed a time limit for the completion of some of the larger projects for which appropriations were made. While such a stipulation is not absolutely binding, it has the advantage of committing Congress to a proposed work and of furnishing parties contemplating the use of a waterway with advance notice of the probable date of its availability. A further step was taken in the same direction in 1912, when the army engineers were instructed to report to Congress, with

reference to projects which they investigated and approved, the rate at which the work should be prosecuted.

When Congress began to introduce scientific methods into river and harbor appropriations, it found that the number of unfinished projects was so large as to make it well-nigh impossible to carry improvements to a speedy completion. In the act of 1907 a policy of completing old projects before undertaking new ones was followed to some extent. The readoption, beginning with 1910, after a lapse of 28 years, of the practice of making annual appropriation bills, made it easier to keep improvements abreast of current needs, and prevent losses and delays incident to the enforced idleness of men and equipment and the leaving of work in an unfinished state pending Congressional action. Appropriations were, moreover, relatively large during the five years ending with 1912. The average annual river and harbor expenditures for the five years, 1898-1902, were \$17,206,461; for the five years, 1908-1912, \$32,558,354.

Congress has recognized in a slight way the necessity of there being river ports and terminals as well as navigable channels. The river and harbor act of 1909 provided that the engineers' reports upon projects authorized by Congress to be investigated shall contain information as to the necessity for the establishment of terminal and transfer facilities. The act of 1912 authorized the Secretary of War to investigate and report on the water terminals and facilities contiguous to all waters under improvement by the United States. But the recommendation of the National Waterways Commission, that no further appropriations for rivers and harbors be made until assurance is given by local authorities that adequate terminal facilities will be available at reasonable charges, has not been followed.

Congress has given some attention to measures for the prevention of floods. Flood control, however, is not considered to be a part of the work of improving rivers for purposes of navigation. River and harbor legislation since 1902 has accordingly included appropriations for the Mississippi River levees, only when such levees were considered necessary for channel regulation. The United States has borne less than one-half of the expense of the construction of the Mississippi River levees, the remainder of the burden having been borne by the States along the lower course of the river. In 1912 Congress authorized a special board of army engineers to investigate and report upon the necessity and practicability of constructing dams to provide impounding reservoirs at the headwaters of the Allegheny, Monongahela, and Ohio Rivers. The opinion of engineers as to the practicability of preventing floods by the construction of dams near the headwaters of rivers is divided. Some dams have been constructed in the upper courses of the Mississippi River, but those dams were built, not to reduce floods, but to provide more dependable water-power at Minneapolis.

The interdependence, under some circumstances, of channel improvement and water-power development has been recognized by Congress. By the law of 1906, individuals or companies, after having obtained grants to construct a dam across a navigable stream, must submit plans to the Secretary of War and the Chief of Engineers and receive their approval, before construction is commenced; and in 1910 these officials were given authority to consider the relation of a proposed dam to a comprehensive plan for the improvement of the waterway concerned, with a view to the promotion, both of navigability and of water-power, and they were, moreover, given power to impose conditions upon the grantees looking to the improvement and development of navigation and to fix charges to pay for the restoration of the navigation conditions existing before the privilege was granted. Congress provided in 1910 for the levy of charges by the Chief of Engineers and the Secretary of War on persons who are granted the right to construct dams, when the grantees receive any direct benefit from the maintenance by the United States either of storage reservoirs, or of forested watersheds maintained at headwaters of navigable streams for the purpose of developing, improving, or preserving navigability.

Congress has enacted legislation looking to the development of water-power directly by the Federal Government. The army engineers were in 1909 authorized to take into consideration, when making preliminary surveys, the possibilities of water-power development, and to submit recommendations looking to that end when the cost of the improvements to navigation might thereby be diminished. The river and harbor act of 1912, moreover, authorized the Secretary of War, at his discretion, upon the recommendation of the Chief of Engineers, to equip dams at any time authorized for the improvement of navigation with such foundations, sluices, and other works as may be considered desirable "in order to make possible the economical future development of water-power."

Recent river and harbor acts have not only increased the scope of the reports to be made by the army engineers on projects submitted to them for investigation, in the respects which have been mentioned, but have also required that the plans and estimates shall contain a statement as to "such other subjects as may be properly connected with such project." The only limitation is that the improvements recommended must relate directly to navigation and be considered with reference to their bearing upon it.

FEDERAL REGULATION OF WATERWAYS.

Having power under the Constitution to regulate commerce among the States and with foreign nations, the Federal Government is the authority which regulates waterways that are or may be used in inter-

state commerce. The waterways at ocean, lake, and river ports are regulated both by the States and by the Federal Government. The United States Government constructs the channel to and past the ports, marks the channel, and establishes the pierhead lines. The administrative activities of the Federal Government at ports tend to increase with the development of commerce and with the increase in the size of harbors. Beginning with 1899, it has been the general practice of the Federal Government to establish pierhead lines and thus to define the boundary between the State and Federal jurisdiction at harbors and ports.

Pilotage and quarantine administration is shared jointly by the States and the Federal Government. The States have regulated pilotage since 1789 by permission of the Federal Government, but as regards quarantine the States, under their police power, have the right to maintain quarantine services for the protection of the public health. The Federal Government under its power to regulate commerce may also maintain quarantine administration, and the tendency is for the States to turn over to the Federal Government all matters of quarantine.

The Federal Government carefully regulates structures placed in or over navigable waterways. In 1866 the Secretary of War was authorized and directed by Congress to examine and pass upon plans for railroad bridges across the Mississippi River. In 1884 an act was passed providing for the elimination of certain obstructions to navigation in the Mississippi. By the river and harbor act of 1899, the control by the Federal Government of structures over navigable waterways was made so broad that no construction in or over a navigable waterway may be undertaken until the plans have been approved by the Chief of Engineers and the Secretary of War. The State of New York, for example, which is making radical improvements in the Erie Canal, was obliged to submit its plans for changing the canal to the Chief of Engineers of the U. S. Army and the Secretary of War for approval, because the Erie Canal, although lying wholly within the State of New York, is largely used in interstate commerce.

The interstate commerce act of 1887 gave the Interstate Commerce Commission limited power over carriers by water. The act provided that common carriers "engaged in the transportation of passengers or property wholly by railroad (or partly by railroad and partly by water when both are used under common control, management or arrangement for a continuous carriage or shipment), from one State or Territory of the United States or the District of Columbia, to any other State or Territory of the United States or the District of Columbia" shall be subject to the jurisdiction of the Commission. The provisions of the act of 1887 enabled the Interstate Commerce Commission to establish through routes and joint maximum rates by a joint rail and water line, but did not give the Commission any authority

over rates of carriers operating by an all-water route. Likewise, carriers engaged in traffic by a joint rail and water route must keep the accounts of their traffic in accordance with the requirements of the Interstate Commerce Commission as to uniform accounting. Carriers engaged solely in transportation by water do not have to make statistical reports to the Interstate Commerce Commission, but carriers such as those on the Great Lakes, which are engaged both in transportation by all-water routes and in the transportation of traffic that moves by joint rail and water routes, must report to the Interstate Commerce Commission statistics of all their traffic by water.

The Panama Canal act of August 24, 1912, gave the Interstate Commerce Commission authority "to establish physical connection between the lines of the rail carrier and the dock of the water carrier by directing the rail carrier to make suitable connection" where this is "reasonably practicable." By the same act the Commission is given power "to establish through routes and maximum joint rates between and over such rail and water lines," and "to establish maximum proportional rates by rail to and from the ports to which the traffic is brought, or from which it is taken by the water carrier, and to determine to what traffic and in connection with what vessels and upon what terms and conditions such rates shall apply."

This amendment of the Interstate Commerce Act was made for the purpose of insuring to shippers facilities for through shipment of traffic by joint rail and water lines, and thus to prevent the railroads from limiting the usefulness of waterways by refusing to enter into joint arrangements with carriers by water as regards services and rates.

Another provision of the Panama Canal act of 1912 makes it unlawful for any railroad company, after the first of July 1914, to own, lease, operate, or control any common carrier by water "operated through the Panama Canal or elsewhere, with which said railroad or other common carrier aforesaid does or may compete for traffic." The Interstate Commerce Commission is given jurisdiction to determine the questions of fact as to the competition or possible competition. If the Interstate Commerce Commission is of the opinion that any particular service by water that may be maintained or controlled by a railroad (provided it is not a service through the Panama Canal) is in the interest of the public and of advantage and convenience to commerce, the Commission may permit the continuance of such service, provided the railroad company controlling the carrier by water makes application for the continuance of the service, and provided, further, that the water carrier shall become subject to all the provisions of the interstate commerce act.

A large number of coastwise lines are directly or indirectly controlled by railroad companies, and most of the package freight lines on the Great Lakes have been owned by the trunk-line railroads. The

Interstate Commerce Commission was petitioned by numerous railroad companies for permission to continue the ownership and operation of steamship lines. The most important of these petitions was the one by the trunk-line railroads having steamship lines on the Great Lakes. In a decision rendered May 7, 1915, the Interstate Commerce Commission held that "none of the several existing specified services by water is being operated in the interest of the public or is of advantage to the convenience or commerce of the people," and that the railroads must dispose of their lines of vessels on the Great Lakes by the first of December 1915.

The provision of the Panama Canal act of 1912 which requires the complete separation of carriers by rail and carriers by water establishes a new principle in the regulation of the use of waterways. This action of Congress was based upon the theory that the competition of waterways with railways is practicable and desirable, and that waterways will be more largely used and be of greater benefit, if the railroads are not allowed to own vessels to be operated over waterways that parallel, or form routes that compete with, the lines of the railroad company owning the vessels.

CHAPTER XLI.

TARIFF PROVISIONS CONCERNING THE SHIPPING AND FOREIGN TRADE OF THE UNITED STATES.¹

Three general periods of tariff provisions regarding shipping and foreign trade, 335. Early tariff provisions to aid Oriental trade, 336. Tariff provisions affording protection to shipping, 337. Tariff provisions regarding shipping reciprocity, 338. List of treaties establishing shipping reciprocity, 339. Trade reciprocity treaties with Canada, 340; with Hawaii, 341. Reciprocity agreements of the McKinley and Dingley acts, 342. Reciprocity treaty with Cuba, 344. List of reciprocity treaties and agreements, 345. Miscellaneous tariff provisions to promote trade, 346. The dual tariff policy of the Payne-Aldrich act of 1909, 347. Summary, 347. Tabular digest of provisions in tariff and tonnage-tax laws intended to promote foreign commerce, American shipping, and ship-building, 349.

Though the tariff laws of the United States,² in their relation to the foreign trade, have been altered on numerous occasions, three general periods are distinguishable. During the first, which extended from the beginning of national tariff legislation until 1818, the country's trade was largely international, and the tariff laws consequently aimed to promote the foreign trade. During the second, which, with certain interruptions, extended from the act of 1818 to the act of 1909, the foremost purpose was the development of home industries and the promotion of home markets. The tariff acts enacted during this period contained numerous provisions designed to assist the foreign trade, but these provisions were of minor importance. With the exception of limited periods in 1846 to 1861, and 1894 to 1897, it was the era of protection, and the protective-tariff policy, as then favored, was one that aimed to provide home markets for the industries which it fostered.

The third period began with the tariff act of 1909. It is too early to determine whether this period is to be one characterized by protection or free trade or by an intermediate policy. In either event it is a period during which the development of the foreign trade is a consideration of greater importance than it formerly was in the drafting of the country's tariff laws. The tariff act of 1909 protected American industries and domestic markets with high import duties, but embodied the principle of a maximum and minimum schedule with the avowed purpose of assisting the American exporter in the development of foreign markets. The act of 1913, which reflects a reaction toward freer trade, endeavors to promote the foreign trade by reducing import duties and negotiating trade agreements. So urgent has the need for foreign as well as domestic markets become to the manufacturing industries that both the protective and free-trade policies of recent years, although in different ways, endeavor to promote the for-

¹This chapter was written by G. G. Huebner.

²For discussion of Philippine tariff acts see chap. xxviii.

eign trade. A protective-tariff administration showed its desire to promote international trade in 1911 by extending to Canada, the second largest foreign market for American exports, an offer for comprehensive trade reciprocity.

An examination of the sections relating directly to foreign commerce in the various tariff acts of the United States will show that such provisions may conveniently be divided into (1) those designed to promote the Oriental trade, (2) those concerning shipping protection, (3) those regarding shipping reciprocity, (4) those providing for trade reciprocity treaties and agreements, and (5) miscellaneous provisions.¹

EARLY TARIFF PROVISIONS TO AID THE ORIENTAL TRADE.

Immediately after the Revolutionary War there began a period of brisk foreign commerce, in which American merchants sought to trade directly with markets formerly reached by way of Great Britain and Europe. In 1784 the direct trade with China commenced, and at about the same time American East Indiamen began their first voyages.² July 4, 1789, with the first law enacted by the National Government, began a series of tariff provisions which so stimulated this oriental trade as to make it an important factor throughout the early commercial life of America. This law, as stated in Chapter XXIII, imposed a duty on tea imported direct from India and China, in American vessels, ranging from 6 to 20 cents per pound; but on tea imported from Europe the duty ranged from 8 to 26 cents, and on tea brought in foreign vessels, from 15 to 45 cents per pound. Likewise, all other Oriental products imported in foreign vessels were obliged to pay a duty of 12.5 per cent ad valorem, or almost twice the rate levied on imports brought in American vessels. Even as late as 1830 provisions similar to these were reenacted in tariff laws.

Largely because of these tariff provisions, the oriental trade rapidly became an important factor in the commerce of Salem, Boston, New York, Providence, Philadelphia, and Baltimore. It assisted in the establishment of various manufacturing industries, such as silk spinning and finishing, and the production of morocco leather, and "laid the foundation of those great fortunes which constitute the origin of the wealth of so many of the older New England families."³ The favorable tariffs were taken advantage of especially by the merchants of Massachusetts, who "brought back immense quantities of tea, spices, sugar, coffee, silks, nankeen and other cloths—all of them of great value in proportion to their bulk and therefore yielding heavy profits in the carrying trade; and whatever did not find a market at home was reshipped from New England ports and sold at Hamburg or northern Europe. It may be said that the marked commercial feature of the period was the development of this trade."³

¹See table 85 at end of this chapter for tabulation of provisions intended to promote foreign commerce.

²See volume I, chap. xi.

³Soley, *Maritime Industries of America*, in Shaler, *The United States of America*, I, 525.

The intent of these laws was (1) to increase the trade with the East and (2) to confine it to American vessels; and both of these aims were successfully effected. The increase in trade was confined principally to the direct importation of oriental wares, for there was at that time little demand for American exports in Eastern markets. Moreover, neither the increase in trade nor the growth of the far-eastern carrying trade was due entirely to these provisions of the tariff laws. Other forces also tended to promote foreign commerce and the carrying trade of the United States during the years 1789 to the War of 1812, in the Orient as well as elsewhere.¹

TARIFF PROVISIONS AFFORDING PROTECTION TO SHIPPING.

The second group of tariff provisions, which was an appreciable factor during the early growth of American foreign commerce, provided for protection to American shipping. Under the law of 1789 imports in American vessels received a discount of 10 per cent below the general tariff rates. In 1794, however, this was changed, so that imports in foreign vessels were obliged to pay an increase of 10 per cent. In this form the protection to shipping was maintained until 1815, when its "outer garments" were removed by the introduction of shipping reciprocity in the direct trade with foreign nations, and it was still further weakened in 1828, when the President was authorized to suspend it also in the indirect trade with all nations which would reciprocate. Thereafter, the 10 per cent discrimination against foreign vessels was repeatedly reenacted in practically all subsequent tariff laws of importance, and it appears even in the tariff act of 1913, but after 1828 the provision applied only to those foreign vessels which by law or treaty are not entitled to shipping reciprocity.

The act of 1913 endeavored to revert to the policy of shipping protection by providing "that a discount of 5 per cent on all duties imposed by this act shall be allowed on such goods, wares, and merchandise as shall be imported in vessels admitted to registration under the laws of the United States." It also provided, however, "that nothing in this subsection (J 7) shall be so construed as to abrogate or in any manner impair or affect the provisions of any treaty concluded between the United States and any foreign nation," and the discount provision of the act of 1913 has thus far been without effect.

In the early tariff laws, American shipping, as was set forth in Chapter XXX, was further protected by discriminatory tonnage duties. The law of 1804 levied a "light money" tax of 50 cents per ton on foreign vessels, and in 1812 this was increased to \$1.50. The law of 1815, however, sounded the death knell of this form of shipping protection in the direct foreign trade. Though in exceptional instances discriminating tonnage duties were thereafter increased, reciprocity steadily gained ground. In 1817 tonnage duties were further increased

¹See chap. xxlii.

in the case of nations barring American vessels, and occasionally exorbitant taxes were imposed upon vessels of particular nations, such as the duty of \$18 against French vessels in 1820, but their intent was to enforce shipping reciprocity and not to discriminate in favor of American vessels. As in the case of discriminating tariffs on commodities, provision was made in 1828 for the removal of discriminating tonnage duties in all foreign trade, indirect as well as direct. Finally, in 1832, the President was given definite authority to reciprocate in the matter of tonnage duties.

The tonnage-tax law of 1884, as amended in 1886, also provided for reciprocal tonnage-tax exemption, and imposed a duty of 3 cents per ton, but not exceeding 15 cents annually, upon all vessels entering from foreign ports of North America, Central and South America, the West Indies, and the Bahamas, and of 6 cents per ton, but not exceeding 30 cents annually, upon vessels from the ports of other nations. It remained in force until August 1909, when the tariff act of that year reduced the tax on ships trading in nearby foreign waters to 2 cents, not to exceed 10 cents per net register ton per year, and repealed the provision under which vessels coming from a foreign port in which no tonnage taxes or corresponding charges were imposed on American vessels were exempted from tonnage taxes in all ports of the United States. In March 1910, however, the act of the preceding year was changed so that "vessels entering otherwise than by sea" from a country entitled to the 2 cents tonnage-tax rate are exempted from the payment of tonnage taxes in case such countries do not impose tonnage, light-house, or other equivalent dues upon American vessels.

The effect of protection to American shipping was decidedly stimulating. In 1789 the American merchant marine carried 17.5 per cent of the imports and 30 per cent of the exports; five years later these proportions were 90 and 88 per cent, respectively. The importance of the American merchant marine increased until the War of 1812, when all trade declined; but by 1820 it again carried 90 per cent of the imports and 80 per cent of the exports. Though the absolute tonnage of American vessels engaged in the foreign trade reached its climax in 1861, with a total of 2,496,894 tons, their relative position began to decline in the later thirties. In 1913 the absolute tonnage of the American merchant marine was 1,027,000, and it carried but 8.9 per cent of the country's foreign trade.

TARIFF PROVISIONS REGARDING SHIPPING RECIPROCITY.

As was noted above, the first step away from shipping protection was taken in 1815, when provision was made to remove it in the direct trade with foreign nations, and the second in 1828, when similar provision was made for the indirect trade. Although the effect of this liberal legislation was detrimental to American shipping, its intent was to promote both the shipping industry and foreign commerce. The

belief was prevalent that the American merchant marine was then so firmly intrenched that, if shipping reciprocity were established with foreign nations, it would destroy foreign shipping in the American trade. It was held that as long as American tariffs granted protection to shipping, foreign nations would continue to levy hostile tariffs against American vessels and prevent their successful competition. In 1828 Senator Levi Woodbury, of New Hampshire, said:

"By this bill we now hold out the olive branch to all. If our terms are accepted, we may obtain most of the transportation now enjoyed by foreigners in the eight- or ten-hundredths of our foreign tonnage; as they are now enabled to compete with us to that extent, chiefly by the discrimination they enjoy at home."¹

The extension of the provisions for shipping reciprocity with the various foreign nations is indicated in the following table.

TABLE 83.—*List of treaties establishing shipping reciprocity.*²

Nation.	Year.	Nation.	Year.
Partial reciprocity:		Full Reciprocity— <i>continued</i> :	
Great Britain.....	1816	Mexico.....	1848
Holland.....	1817	New Granada.....	1848
Norway-Sweden.....	1818	Great Britain.....	1849
France.....	1823	Guatemala and Costa Rica.....	1852
Holland, Prussia, Lubeck, Hamburg, Bremen, Norway, Oldenburg, Sardinia, Russia, Denmark.....	1826	Salvador.....	1852
Central America.....	1826	Peru.....	1852
Norway-Sweden ³	1828	Holland ³	1853
Great Britain ³	1828	Argentina.....	1854
Martinique and Guadeloupe.....	1828	Sicily.....	1856
Brazil.....	1828	Papal States.....	1858
Prussia.....	1829	Denmark ³	1858
Full reciprocity:		Belgium.....	1859
British North America and West Indies.....	1830	Paraguay.....	1860
Austro-Hungary.....	1831	Venezuela.....	1861
Spain.....	1832	Ottoman Porte.....	1862
Mexico.....	1832	Bolivia.....	1862
Russia.....	1832	Liberia.....	1863
Mecklenburg-Schwerin.....	1834	Honduras.....	1865
Portugal, Madeira, Porto Santo, and Azores.....	1836	Haiti.....	1866
Tuscany.....	1836	Dominican Republic.....	1867
Venezuela.....	1836	Nicaragua.....	1868
Greece.....	1838	Madagascar.....	1868
Sardinia.....	1839	Italy.....	1871
Holland.....	1839	Japan.....	1872
Hanover.....	1840	France ³	1873
Portugal.....	1840	Salvador ³	1874
Ecuador.....	1842	Peru ³	1874
Cayenne.....	1842	Belgium ³	1875
Sicily.....	1845	Korea.....	1882
Belgium.....	1846	Madagascar ³	1883
Hanover ³	1846	Spanish Islands.....	1886
Oldenburg ³	1847	Spain ³	1887
Mecklenburg-Schwerin ³	1847	Peru ³	1888
		Tobago.....	1891
		Philippine Islands.....	1898
		Japan.....	1898
		Spain ³	1902
		Japan ³	1911

¹Bates, *The American Marine*, 117.

²From *Tariff Laws*, and *Cong. Record*, 59 Cong., 2 sess., XLI, pt. v, Feb. 13, 1907.

³Extension or renewal.

At various times reciprocity was suspended to favor particular nations, but only temporarily, and for the purpose of further removing foreign restrictions against American vessels. For example, in 1872 it was suspended in the case of French vessels in the indirect trade, but after France had removed her discriminations, it was at once reenacted.

The original intent of shipping reciprocity was to benefit American shipping, but its ultimate effect in this respect was detrimental. It was the American marine and not those of foreign nations which declined in the subsequent free competition. There might have been considerable decline even if shipping protection had been retained, but the force of competition was greatly increased by the introduction of shipping reciprocity.

TRADE RECIPROCITY TREATIES.

During the second period of tariff legislation the most important provisions enacted with the intent of promoting foreign commerce were those providing for commercial reciprocity. The first treaty of this character was the one made with Canada in 1855. It provided for commercial reciprocity as to a large number of agricultural and forest products.

This treaty favored Canada more than the United States. It was negotiated at the time when protectionism was in disfavor, and was intended as the first step toward free trade.¹ With the exception of rice, cotton, tar, pitch, turpentine, and tobacco, practically all the articles included in the treaty were those of which Canada had a surplus. The manufactured products which the American exporter desired to market in the provinces were not included in the treaty provisions, and in order to replenish the revenue lost because of the free trade in agricultural products, Canada at once increased the tariff on those of the manufacturing industries. During the years from 1855 to 1859 the rates on molasses were increased from 16 to 30 per cent, on boots and shoes from 12.5 to 25 per cent, and on cotton, woolen, silk, and iron goods from 12.5 to 20 per cent. Imports from Canada increased rapidly, but the effect upon the market for the products of the United States was unfavorable.

When, in 1866, the renewal of the treaty was under consideration, hostile sentiment had become so strong that it failed. The main reasons for this hostility were: (1) public opinion had returned to protection; (2) there was a strong sentiment against Canada and Great Britain because of their attitude during the Civil War; (3) the pro-southern party in England was attempting to weaken the relations of the United States with Canada; (4) special interests were "pressed by Canadian competition, forcing them to reduce prices to the consumer where otherwise they would have found it easy to maintain

¹Stanwood, *American Tariff Controversies*, II, 136.

them;¹ and (5) the United States had gained less from the commercial arrangement than had Canada. The treaty was not commercially satisfactory, but the political influences mentioned played an important rôle at the time of its discontinuance. Charles F. Adams went so far as to say that "all these measures [for discontinuance] were the result rather of a strong political feeling than of any commercial considerations."²

The Canadians felt that they had lost an advantageous arrangement, and scarcely a decade passed before they attempted to negotiate a new reciprocity treaty. In this they were successful in 1873, but the Senate failed to ratify the treaty. After the enactment of the tariff act of 1909, which permitted the application of the minimum tariff to Canadian imports by reason of certain Canadian concessions on American exports, negotiations for complete reciprocity were mutually renewed. A comprehensive reciprocity treaty which had the approval of the President, of Congress, and of the Canadian Ministry, and which was drafted along lines which both Canadian parties had long recognized as desirable, was negotiated in 1911. Political opposition to the treaty, however, developed in Canada, and "the agreement was denounced [by the Canadian voters] as the forerunner of annexation," and, "in order to demonstrate a loyalty which might have been taken for granted it was considered necessary to sacrifice unquestioned economic advantages."³

The Hawaiian reciprocity treaty, which became effective in 1876, and which was renewed with but slight changes in 1887, continued until the annexation of the islands, and, in striking contrast with the Canadian experiment, was both politically and commercially successful. It placed practically all the products of the Hawaiian Islands upon the free list, and practically all American exports to the islands, especially those of the manufacturing industries, were likewise admitted free of duty. Immediately after the treaty became effective, the export trade to Hawaii increased from \$662,164 in 1876 to \$1,272,949 in 1877, and the import trade from \$1,376,681 to \$2,550,335. Throughout the twenty-two years of the treaty's life both the import and export trade increased, with but few interruptions.

The chief aim of the Hawaiian treaty, however, was political. The opinion was commonly expressed at the time of its negotiation that, unless the United States secured control of the islands, they would fall into the hands of Great Britain. They were believed to be desirable as a stepping-stone to the markets of the Orient, and it was hoped that the treaty would finally result in annexation. The clause which prevented Hawaii from extending similar privileges to other nations, and

¹Laughlin and Willis, *Reciprocity*, 64.

²House Exec. Doc., 39 Cong., 1 sess., I, pt. i, 111.

³O. D. Skelton (a Canadian), "Canada's Rejection of Reciprocity," in *Journal of Political Economy*, XIX, 1911, p. 730.

the clause which granted the free entrance of all her chief products into the United States, were highly instrumental in confining Hawaiian commerce almost exclusively to the United States, and in causing an extensive investment of American capital in Hawaiian sugar plantations and general industries. When this was accomplished, the political annexation of the islands came about as the successful result of the reciprocity treaty.

In 1883 a comprehensive reciprocity treaty was negotiated with Mexico, but owing to the refusal of the Congress of the United States to pass the legislation necessary to carry the treaty into effect, although the time originally fixed for its ratification was extended in 1885 and again in 1886, the convention failed to become operative.

These, however, were but isolated treaties, and no general provisions for reciprocity were enacted until 1890. The movement was supported by Secretary Blaine, who, even at this time, when the manufacturing surplus was relatively small, said:

"I wish to declare the opinion that the United States has reached a point where one of its highest duties is to enlarge the area of its foreign trade. . . . I mean the expansion of trade with countries where we can find profitable exchanges."

These countries, he believed, were Mexico and the republics of Central and South America. His aim was to inaugurate free trade upon the Western Hemisphere in a large number of articles.

RECIPROCITY AGREEMENTS UNDER THE McKINLEY AND DINGLEY ACTS.

Though the reciprocity desired by Secretary Blaine was defeated by those interested in the wool, copper, wood, and ore industries,¹ the advocates of an extension of the foreign markets succeeded in enacting a provision for limited retaliation. Section 3 of the McKinley act provided that if the President believed that any nation exporting sugar, molasses, coffee, hides, or "any such articles," imposed duties upon American products which he considered reciprocally unequal, he might remove these imports from the free list and impose upon them the duties specified by law. As is shown in table 84, on page 345, under this section of the McKinley act, agreements were made with Germany, Austria-Hungary, and various countries of the West Indies and Central and South America. The effect of these agreements was, however, but slight, because all were virtually abrogated by the Wilson act of 1894. Germany removed the restrictions against American meats and levied the conventional German tariff on most of the agricultural imports; and Austria-Hungary accorded "most-favored-nation" treatment to American products. The trade with both of these nations was favorably affected, but of all the agreements with the West India Islands and Central and South America, the Cuban

¹Stanwood, II, 280, Speech of Senator Gibson, of Louisiana.

agreement alone resulted in an increased trade. In the remainder of these markets trade was as yet so undeveloped that it would have been unreasonable to expect a spontaneous response to tariff arrangements which were operative but two or three years. The McKinley agreements contained the basis for an expansion of foreign commerce, but they were terminated by the Wilson act in 1894.

Three years after the enactment of the Wilson act, the Republican party was overwhelmingly successful, and protectionist sentiment reached its climax. Though there was again a demand for increased foreign markets, protectionism was so strong that the reciprocity provisions of the Dingley act of 1897 were distinctly weaker than those of seven years prior. The first part of section 3, which was apparently intended primarily for France and Germany, provided that the President might negotiate reciprocity agreements by reducing the tariffs upon argols, crude tartar, wine lees, brandies, spirits, champagne and sparkling wines, still wines, vermouth, paintings, and statuary. The second part of this section contains an equally scanty list of articles—coffee, tea, tonka beans, vanilla beans, or “any such articles”—and was inserted to favor the Central and South American republics. Besides these provisions, the act contained a section which upon paper appears far-reaching, but which in reality was inserted rather for policy than for expected results. Section 4 provided that within two years the President might negotiate reciprocity treaties with any country, admitting imports free of duty or at rates not more than 20 per cent below those specified in the act, in return for concessions to American exports, but that such treaties required approval by Congress before going into effect.

In spite of the meagerness of the provisions of section 3, two groups of reciprocity agreements were successfully negotiated. The first group, which became effective shortly after the enactment of the law, comprised the agreements with France, Germany, Portugal, Italy, and Switzerland. In return for favorable duties on certain articles of French manufacture, the French agreement extended the minimum tariff acts of France to some 21 American products. The German agreement, in return for the same concessions, granted to the United States the same tariff rates as Germany had accorded to six neighboring countries and annulled the regulations providing for the inspection of American dried and evaporated fruits. The concessions obtained under the Italian agreement of 1900 affected but a small number of articles, and those obtained under the Portuguese agreement of the same year were comparatively inconsequential. The Swiss agreement of 1898, which was in effect but little over two years, was the result of the peculiar wording of the most-favored-nation clause contained in the general commercial treaty of 1850.

The second group of reciprocity agreements made under section 3 of the Dingley act of 1897 were negotiated in the years 1906 to 1908.

The concessions obtained from, and granted to, France were increased somewhat by a supplementary agreement in 1908. When, in 1907, a new German tariff act threatened to discriminate against American exports, the German agreement was superseded by a revised agreement whereby the United States granted the lowest tariff rates on sparkling wines in addition to those on the commodities previously included in the agreement of 1900, and in return secured the minimum German tariff rates on about 96.5 per cent of the wares shipped from the United States to Germany. A supplementary Italian agreement was adopted in 1909, and the Portuguese agreement was amended in 1907. A new reciprocity agreement with Switzerland was negotiated in 1906; in the same year an agreement was entered into with Bulgaria; in 1906 and 1909, with Spain; and in 1907, with Great Britain and the Netherlands. Since all of these later treaties were short-lived, and some of them applicable to but a small number of commodities, their effect upon the foreign trade was small.

As is seen in table 84, on page 345, the agreements with but four countries—France, Germany, Italy, and Portugal—were in effect a reasonable length of time. Since the Italian and Portuguese agreements were based on but a small number of articles, their combined effect was limited. The French and German agreements, however, were partly responsible for the rapid advance in the trade with those countries. The imports from France increased from a value of \$52,731,000 in 1898 to \$108,387,000 in 1909, and the exports to France during the same years advanced from \$95,459,000 to \$108,764,000. The imports from Germany grew from \$97,375,000 in 1900 to \$168,805,000 in 1909, and the exports to that country during the life of the German agreements grew from \$187,348,000 to \$249,556,000. All the agreements negotiated under section B of the tariff act of 1897 were terminated by the act of 1909.

Eleven reciprocal treaties were negotiated under section 4 of the tariff act of 1897, shortly after the enactment of that law, but not one was ever ratified by the Senate.¹ The tariff sentiment at that time was so strongly protective that Congress frowned upon any effort at comprehensive reciprocity.

The last reciprocal tariff arrangement entered into by the United States was the Cuban treaty of 1903. Cuba, by her position, is commercially bound to the United States; yet, largely because of Spanish possession, and prohibitive tariffs fixed by Spain, the natural tendencies of trade were for decades so diverted that Cuban merchants, though their chief markets were in America, bought but few American products. Even as late as 1904 the United States provided markets

¹These treaties, known as the Kasson treaties, were negotiated with Jamaica, Turks and Caicos Islands, Barbados, Bermuda, British Guiana, Dutch West Indies, Dominican Republic, Nicaragua, Ecuador, Argentina, and France.

for 83.6 per cent of Cuba's exports, but furnished only 42.7 per cent of her imports. Political enthusiasm was doubtless an important factor in the negotiations, but there was also a permanent desire, resulting from the interest in the development of the export trade of the United States, to stimulate the American trade with Cuba.

TABLE 84.—*List of reciprocity treaties and agreements.*

Nature.	Country.	Effective.	Terminated.
Treaty.....	Canada.....	Nov. 16, 1855	Nov. 17, 1866.
Treaty.....	Hawaiian Islands.....	Sept. 9, 1876	Apr. 30, 1900.
	Brazil.....	Apr. 1, 1891	
	Santo Domingo.....	Sept. 1, 1891	
	Great Britain for:		
	Barbados.....	Feb. 1, 1892	
	Jamaica.....	Feb. 1, 1892	
	Leeward Islands.....	Feb. 1, 1892	
	Trinidad and Tobago.....	Feb. 1, 1892	
	Windward Islands (except- ing Grenada).....	Feb. 1, 1892	Aug. 27, 1894.
Agreements under sec. 3 of McKinley act.	British Guiana.....	Apr. 1, 1892	
	Salvador.....	Feb. 1, 1892	
	Nicaragua.....	Mar. 12, 1892	
	Honduras.....	May 25, 1892	
	Guatemala.....	May 30, 1892	
	Cuba and Porto Rico.....	Sept. 1, 1891	
	Germany.....	Feb. 1, 1892	
	Austria-Hungary.....	May 26, 1892	
	France.....	June 1, 1898	Oct. 31, 1909.
	France (supplementary).....	Feb. 1, 1908	Do.
	Germany.....	July 13, 1900	Feb. 6, 1910.
	do.....	July 1, 1907	Do.
	Portugal, Azores, Madeira.....	June 12, 1900	Aug. 7, 1910.
	Portugal (supplementary).....	Jan. 24, 1907	Do.
	Switzerland.....	June 1, 1898	Nov. 23, 1900.
Agreements under sec. 3 of Dingley act.	do.....	Jan. 1, 1906	Oct. 31, 1909.
	Italy.....	July 18, 1900	Aug. 7, 1910.
	Italy (supplementary).....	Apr. 24, 1909	Do.
	Great Britain.....	Dec. 5, 1907	Feb. 7, 1910.
	Netherlands.....	Aug. 12, 1908	Aug. 7, 1910.
	Bulgaria.....	Sept. 15, 1906	Oct. 31, 1909.
	Spain.....	Aug. 1, 1906 ¹	Aug. 7, 1910.
	Spain (supplementary).....	Feb. 20, 1909 ¹	Do.
Treaty.....	Cuba.....	Dec. 27, 1903	Still in force.

¹Date of signature.

To accomplish this it was found that section 3 of the Dingley act was inadequate, and the negotiations resulted, not in an executive agreement limited to a scanty list of commodities, but in a treaty. Congress authorized its negotiation December 17, 1903, in an enabling act which virtually revived section 4 of the tariff act of 1897. In the treaty which became effective on December 27, 1903, and which is still operative, the United States agrees to admit all dutiable products of Cuba at a reduction of 20 per cent of the general tariff rates, and Cuba agrees to admit a long list of enumerated American products at reductions of 25, 30, and 40 per cent, and all other dutiable goods at a reduc-

tion of 20 per cent. The United States and Cuba, moreover, mutually agreed that the concessions granted in the treaty shall be distinctly preferential and shall be extended to no other nation.

The growth of trade with Cuba in recent years had been almost spectacular, and was effectively stimulated by the treaty. In 1900 the imports from Cuba were valued at \$31,371,704, and in 1913 at \$126,088,000. Similarly, in 1900, the exports of American products to Cuba were valued at \$25,236,808, as compared with \$70,581,000 in 1913. The United States now provides a market for over 87 per cent of all the exports of Cuba, and provides the island with about 53 per cent of its imports.

MISCELLANEOUS TARIFF PROVISIONS TO PROMOTE TRADE.

As is shown in table 85, page 349, numerous miscellaneous tariff provisions designed to promote foreign commerce have been enacted from time to time. From the very beginning re-export drawbacks were granted, the first tariff act authorizing a drawback of 99 per cent on numerous articles and the second, on all imported commodities re-exported in accordance with prescribed regulations. Subsequent legislation was somewhat less liberal. In 1861, however, a general drawback of 90 per cent was extended to all re-exports, and in 1890 the original basis of 99 per cent was re-established. Regulations have likewise been made from time to time for the bonding of goods in storage and in transit.

As stated in Chapter XXXIX, ship-building materials are admitted duty free. In 1872 materials to be used in the building of wooden vessels engaged in the foreign trade and materials to be used in the repair of American vessels engaged in the foreign trade were permitted to enter free of duty. In 1890 the materials to be used in the construction of iron and steel as well as wooden vessels engaged in the foreign trade were permitted to enter free of duty. These provisions had no appreciable effect, because vessels so constructed were permitted to engage in the coastwise trade but two months annually. In 1909 the provision regarding the coastwise trade was extended to six months, and in 1912 the restriction was entirely abolished, and the privilege of importing building and repair materials free of duty was extended to the domestic as well as to the foreign trade, and to foreign as well as to American vessels built in the United States.

The act of 1913, which is at present applicable, permits materials used in the construction of vessels, whether engaged in the foreign or domestic trade, and materials used to repair American vessels engaged in the foreign trade, to enter free of import duties. These liberal provisions have thus far had little effect, because the prices of American and foreign iron and steel have in recent years been so readjusted that there has been little occasion to import ship-building materials from abroad.

The Panama Canal act of August 24, 1912, so revised the registry laws of the United States as to permit foreign-built vessels not more

than five years old to be registered under the American flag, provided they engage only in the foreign trade and are owned by American citizens or by American corporations, the president and managing directors of which are citizens of the United States. This so-called policy of "free shipping" in the foreign trade displaced the long-standing policy which had restricted American registry to American-built vessels. The act of August 18, 1914, enacted because of the scarcity of ocean vessels created by the European War, repealed the requirement that the foreign-built ships were not to be more than five years old, and authorized the President temporarily to suspend certain provisions of the laws governing the registry of foreign vessels under the American flag.

An important innovation which, but for its short life, might have had far-reaching effects upon the foreign trade, was adopted in 1909. The protective tariff act of that year embodied the double tariff system, which many of the commercial nations of the world had adopted and which some of them were so utilizing as to restrict American exports. The Payne-Aldrich act of 1909 terminated the various reciprocity agreements which had been negotiated under section 3 of the Dingley act of 1897, and instead provided two schedules of duties—a minimum schedule applicable to countries which do not unduly discriminate against American products, and a maximum schedule consisting of the minimum rates plus 25 per cent *ad valorem*, which was generally applicable, unless the President by proclamation suspended it in favor of particular countries. The negotiations which followed the adoption of this dual tariff principle resulted in the removal of many undue discriminations. The Secretary of State reported in 1910 that the United States had for the first time secured complete equality of tariff treatment from Germany, also valuable concessions from France, and advantages not formerly enjoyed at the hands of other countries. While certain instances of discrimination continued, the President was able to report in his message of 1912 that the Department of State had been able to secure "substantial most-favored-nation treatment from all the countries of the world."

The Underwood tariff act of 1913 repealed the dual tariff policy and returned to the policy of trade reciprocity. It authorizes the President to negotiate trade agreements "wherein mutual concessions are made looking toward freer trade relations and further reciprocal expansion of trade and commerce," subject to ratification by a majority vote of both houses.

SUMMARY.

An analysis of the tariff schedules shows that, throughout the entire tariff history, provisions have been inserted for the purpose of promoting foreign commerce. During the first period of tariff legislation (1789-1818) the chief provisions of this character were those designed to promote the Oriental trade and to protect American shipping.

During the second period (1818-1909) the reciprocity treaties and agreements were of primary importance as regards the direct promotion of foreign commerce. It is, moreover, probable that the numerous provisions of this character had an appreciable effect upon the development of the foreign commerce of the United States.

When, however, the provisions of the second period are regarded as part of the aggregate tariff policy of the United States, both their number and importance are strikingly secondary. The controlling policy during most of the time was protection, designed to promote the domestic rather than the foreign market. As early as 1791 Alexander Hamilton argued¹ that a foreign market is both small and unstable, and that a "domestic market is greatly to be preferred." When, after the War of 1812, the infant industries were threatened by a flood of foreign imports, and the farmers were complaining of an unstable market for their products, the home-market argument was strongly emphasized. The argument was made effective in 1820, when the demand for a domestic market caused the western and middle agricultural interests to favor protection, and the intent of tariff legislation as regards foreign commerce during the entire period before the reaction of 1846 was that expressed by Henry Clay:

"It is most desirable that there should be both a home and a foreign market. But with respect to their relative superiority I can not entertain a doubt. The home market is first in order and paramount in importance."

From 1846 to 1861 there was a reaction towards freer trade, but after the Civil War a protectionist policy was followed. Even during the first administration of President Cleveland the home-market argument was successfully appealed to. The McKinley act, though it contained the most important reciprocity provisions ever enacted by Congress, established tariff rates that were highly protective. The Dingley tariff law of 1897, enacted when protectionism was at its height, contained reciprocity provisions which were weaker than those of 1890, and its restraining effect upon foreign imports was decidedly greater.

During the third period (beginning with 1909) greater attention has been given to the promotion of the foreign trade in the drafting of tariff laws. The protective acts of 1909 and the tariff-reduction act of 1913 differ widely as to the treatment of foreign imports and as to the method of developing foreign markets. The former aimed to protect home industries and home markets and to promote the export trade by applying the dual tariff policy, while the latter reduced the duties on imports and made provision for the negotiation of reciprocity treaties. The friends and opponents of protection now substantially agree that the development of foreign markets for exports is essential to American industries.

¹*Report on Manufactures* (1791), 33.

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The following table contains a digest of the provisions that have been inserted in the many tariff and tonnage-tax laws of the United States from 1789 to 1913 to promote foreign commerce, American shipping, and ship-building.

TABLE 85.—*Provisions in tariff and tonnage-tax laws intended to promote foreign commerce, American shipping, and ship-building.*¹

Year.	Section.	Provision.
July 1789 ²	1	Reduced duty on tea from India and China in American vessels.
	4	10 per cent discount on imports in American vessels.
Aug. 1790	1	Reduced duty on tea from India and China in American vessels.
	2	10 per cent discount on imports in American vessels.
	3	99 per cent re-export drawback.
Mar. 1791 ³	4	Bounty on dried and pickled fish and salted provisions.
May 1792 ³	5	10 per cent discount on imports in American vessels.
June 1794 ²	4	10 per cent increase on imports in foreign vessels.
Jan. 1795 ²	5	Do.
Mar. 1797 ²	3	Do.
July 1797 ²	.....
May 1800 ²	3	Do.
Mar. 1804 ²	3	Do.
	6	Tonnage duty of 50 cents ("light money") on foreign vessels.
Mar. 1805	1	Sec. 6 of March 1804 defined.
July 1812 ²	2	10 per cent increase on imports in foreign vessels.
	3	Light money increased to \$1.50.
Jan. 1813	2	10 per cent increase on imports in foreign vessels.
Mar. 1815 ³	1	10 per cent discrimination repealed in direct trade with nations granting reciprocal privileges.
Feb. 1816 ²	.....
Apr. 1816 ²	3	10 per cent increase on imports in foreign vessels except where otherwise provided by law or treaty.
Jan. 1817 ³	2	Tonnage duty of \$2 against vessels of nations barring American vessels.
Apr. 1818	24	Export bonding regulations.
Apr. 1818 ^{2 4}	.....
Mar. 1819 ⁴	.....
Apr. 1820 ²	.....
May 1820	1	Tonnage duty of \$18 on French vessels.
May 1822 ³	1	President to negotiate relative to shipping in the British West India trade.
	2	French tonnage discrimination to be suspended upon suitable arrangements by the President.
Mar. 1823	1-4	French tonnage discriminations suspended.
Jan. 1824 ³	4	President may grant reciprocal tonnage favors to certain nations.
May 1824 ⁴	.....
May 1828 ^{3 4}	1	10 per cent discrimination repealed in indirect trade with nations granting reciprocal privileges.
May 1830 ²	.....
July 1832 ³	3	Further extension of reciprocal tonnage favors.
July 1832 ^{2 4}	3	Eastern teas and various tropical goods in American vessels on free list.
Sept. 1841 ²	.....
Aug. 1842 ^{2 4}	9	Do.
	11	10 per cent discrimination against foreign vessels in Eastern trade.

¹Compiled from statutes of United States.

²Re-export drawbacks on certain articles under prescribed regulations.

³For application of this law to different nations, see table 83.

⁴Ten per cent discrimination against foreign vessels, except where otherwise provided by law or treaty.

TABLE 85.—*Provisions in tariff and tonnage-tax laws intended to promote foreign commerce, American shipping and ship-building*¹—Continued.

Year.	Section.	Provision.
July 1846 ²	1 ³	Coffee and tea on free list in American or foreign vessels entitled to reciprocity.
May 1848	1	Coast vessels may do a limited foreign trade.
Nov. 1855	.....	Canadian Reciprocity Treaty.
Mar. 1857	3	Schedule I of July 1846 on tea and coffee re-enacted.
Mar. 1861 ³	23	Do.
	27	Re-export bonding of railroad iron.
Aug. 1861 ⁴	4	90 per cent re-export drawback.
July 1862	14	10 per cent additional duty on eastern cargoes shipped from west of Good Hope.
Mar. 1863 ²	1	Bonding regulations.
	2	Sec. 14 of July 1862 suspended.
June 1864 ⁴	18	Sec. 14 of July 1862 re-enacted, except on certain goods.
July 1866	2	Vessels in Hawaiian trade pay tonnage once annually.
May 1871	.....	Treaty with Great Britain and Canada.
June 1872 ²	10	Articles for building wooden ships in foreign trade free.
	10	Articles for repairing American ships in foreign trade free.
Oct. 1872	1	Shipping reciprocity with France in indirect trade suspended.
Feb. 1873	1	Act of October 1872 relative to French vessels annulled.
Mar. 1873	1	Fish oil, fish, etc., admitted free from Canada.
	3-4	Regulation of Canadian transit trade.
Sept. 1876	.....	Hawaiian Reciprocity Treaty.
May 1882	1	Discrimination on eastern goods imported from west of Good Hope removed.
Dec. 1882	1	Discrimination on eastern goods imported from west of Good Hope and held in storage, removed.
Mar. 1883 ^{2,4}	2497	No imports from nations barring American vessels, except in American or foreign vessels entitled to reciprocity.
June 1884 ³	.....	Tonnage act.
June 1884	.....	Tonnage act amended.
June 1886	.....	Hawaiian reciprocity treaty renewed.
Nov. 1887	.....	McKinley act.
Oct. 1890 ^{4,5}	3	Reciprocity provision.
	8	Articles for building ships in foreign trade free.
	9	Articles for repair of American vessels in foreign trade free.
	15-16	Free lumber from St. John and St. Croix Rivers.
	18-19	Sec. 2497 of March 1883 re-enacted.
	25	99 per cent re-export drawback.
Dec. 1890	1	Rebate on tobacco in certain instances.
Mar. 1891	.....	McKinley act not to impair Hawaiian treaty.
July 1892	.....	An act to enforce the Canadian treaty.
Aug. 1892	1	Retaliatory measure to enforce Canadian treaty.
Aug. 1894 ⁴	.....	Wilson act.
	7	Articles for building ships in foreign trade free.
	8	Articles for repairing American ships in foreign trade free.
	9	Regulations for bonding cargoes.
	15	Sec. 2497 of March 1883 re-enacted.
	22	99 per cent re-export drawback.
July 1897 ^{4,6}	.....	Dingley act:
	3	Reciprocity agreements.
	4	Reciprocity treaties.
	12	Sec. 7 of Wilson act renewed.

¹Compiled from statutes of United States.²Re-export drawbacks on certain articles under prescribed regulations.³Number of schedule.⁴Ten per cent discrimination against foreign vessels, except where otherwise provided by law or treaty.⁵For application of reciprocity provisions, see table 84.⁶Countervailing duties on certain articles.

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TABLE 85.—Provisions in tariff and tonnage-tax laws intended to promote foreign commerce, American shipping, and ship-building¹—Continued.

Year.	Section.	Provision.
July 1897 ^{2,3}	13	Sec. 8 of Wilson act renewed.
	15-16	Regulations for bonding cargoes.
	20-21	Provisions as to St. John and St. Croix lumber.
	30	99 per cent re-export drawback.
	491	Binding twine not on free list, if the American product is charged a duty.
	626	Petroleum not on free list, if the American product is charged a duty.
	675	Sulphuric acid not on free list, if the American product is charged a duty.
July 1897	1	Partial shipping reciprocity may be granted in return for partial shipping rights.
Dec. 1903	.....	Cuban reciprocity treaty.
Aug. 1909 ⁴	.....	Payne-Aldrich act.
	1	Par. 428. Drawback on coal used by American vessels in foreign trade.
	1	Minimum tariff rates.
	2	Maximum tariff rates.
	3	Cuban treaty not terminated.
	4	Reciprocity agreements terminated.
	19	Articles for building ships in foreign trade free.
	20	Articles for repairing American ships in foreign trade free.
	23-24	Regulation for bonding cargoes.
	25	99 per cent re-export drawback.
	36	Tonnage-tax law revised.
Mar. 1910	.....	Do.
Aug. 1912	.....	Panama Canal act.
	5	Articles for building and repairing ships in foreign and domestic trade free.
	5	Free shipping in foreign trade.
Oct. 1913 ²	.....	Underwood act.
	4A	Reciprocity agreements authorized
	4B	Cuban treaty not terminated, except as to article 8.
	4J4	Regulations for bonding cargoes.
	4J5	Articles for building ships in foreign and domestic trade free.
	4J6	Articles for repairing American registered ships free.
	4G7	Discount of 5 per cent on imports in American vessels; treaties not to be impaired.
	4. O	99 per cent re-export drawback.

¹Compiled from statutes of United States.

²Ten per cent discrimination against foreign vessels, except where otherwise provided by law or treaty.

³For application of reciprocity provisions, see table 84.

⁴Countervailing duties on certain articles.

BIBLIOGRAPHY.

REFERENCES ON BIBLIOGRAPHY.

References on bibliography, 352. Colonial trade and trade to 1789, 353. Domestic commerce, 354. The foreign trade, 1789-1914, 356. Trade with non-contiguous possessions, 359. Fisheries, 360. Government aid and commercial policy, 361. General references, 364; on colonial trade and trade to 1789, 370; on domestic commerce, 374; on the foreign trade, 1789-1914, 377; on trade with non-contiguous possessions, 382; on fisheries, 384; on Government aid and commercial policy, 385.

There is no formal bibliography concerning the history of the commerce of the United States. E. L. Bogart, in his *Economic History of the United States* (2d ed., 1912), gives a list of selected references at the close of each chapter and a general list of works on economic history at the close of the volume. The bibliographical material in Clive Day, *History of Commerce* (1907), is excellent, though the space devoted to the United States is necessarily limited. Katharine Coman, *Industrial History of the United States* (rev. ed., 1910), contains marginal references and a short bibliography. Various portions of Channing, Hart and Turner, *Guide to the Study and Reading of American History* (rev. ed., 1912), especially §§ 35, 38, 53, 122, 125, 171, 182, 189, 190, 194, 201, 216, 220, 245, 248, 250, 253, 259, 260, 261, and 264 give a well-selected list of works on the economic development of the nation. This work also gives (§ 26) a list of the indexes to public documents and a list (§ 24) of other useful indexes. The recent bibliography, S. J. Buck, *Travel and Description, 1765-1865* (Collections of the Illinois State Historical Library, vol. ix, Bibliographical Series, vol. ii, 1914), though compiled primarily for the use of students of Illinois history, is nevertheless of value to students in the general field of American history. Special lists of works on topics closely related to commercial history have been issued by the Library of Congress, among the most valuable of which are A. P. C. Griffin, *A List of Books on Mercantile Marine Subsidies* (1903, 1906), *List of Works on Reciprocity with Canada* (1907), *List of Works on the Tariffs of Foreign Countries* (1906); Griffin and Meyer, *List of References on Reciprocity* (1910), and H. H. B. Meyer, *Additional References Relating to Reciprocity with Canada* (1911), *Additional References to Mercantile Marine Subsidies* (1911).

Several general works on the history of the United States contain bibliographies with sections devoted to economic and commercial history. Of especial importance is A. B. Hart (ed.), *The American Nation* (27 vols. 1904-1907), and in no other recent general work on the United States has more attention been given to economic questions or more care given to the preparation of bibliographical material. In Justin Winsor, *Narrative and Critical History of America* (vol. viii, 1889, pp. 489-94), a short list of the best authorities on the economic history of the United States is given, together with a complete bibliography of accounts of travelers who visited the country before 1820. The constant employment of newspaper sources by J. B. McMaster in

his *History of the People of the United States* (8 vols. 1883-1913) renders his work invaluable as a guide to the great mass of information bearing on commercial activities which may be found in newspapers.

The list of indexes of Federal documents to be found in Channing, Hart and Turner's *Guide* (§ 26) has already been mentioned. The most convenient index is the *Checklist of United States Public Documents, 1789-1909* (vol. 1, 1911) prepared by the Superintendent of Documents. Other especially valuable indexes of Federal documentary material are B. P. Moore, *Descriptive Catalogue of Government Publications* (1885); J. M. Baker, *Finding List to Important Serial Documents Published by the Government* (Sen. Doc. No. 238, 56 Cong., 2 sess., 1901); *Index to Reports of Committees of the House of Representatives* (1887); *Index to Reports of Committees of the Senate* (1887); and Superintendent of Documents, *Monthly Catalogue, United States Documents* (1895 —).

The most useful lists of State publications are R. R. Bowker, *State Publications: A Provisional List of the Official Publications of the Several States* (4 parts, 1899-1908), and Adelaide R. Hasse, *Index of Economic Material in Documents of the States of the United States* (Carnegie Inst. Wash. Pub. No. 85, 1907-1915). So far the latter work includes 13 States—Maine, New Hampshire, Vermont, New York, Rhode Island, Massachusetts, California, Illinois, Kentucky, Delaware, Ohio, New Jersey, and Pennsylvania.

COLONIAL TRADE AND TRADE TO 1789.

The bibliography of the commerce of the colonial period was considered at length in two notes appended to Chapter VI of Volume One, pages 112 to 117. The first of the notes discussed the scope and limitations of the sources of statistical information, and the second note reviewed the documentary sources.

The documentary sources of greatest volume and value are in England, and are, for the most part, unpublished. Students using these documents will be assisted by Prof. C. M. Andrews's report upon "Materials in British Archives for American Colonial History" (*American Historical Review*, x, 1904-1905); also his *Guide to the Materials for American History to 1783, in the Public Record Office of Great Britain* (2 vols., 1912-1914); and Andrews and Davenport, *Guide to the Manuscript Materials for the History of the United States to 1783, in the British Museum, in Minor London Archives, and in Libraries of Oxford and Cambridge* (1908). A report was made in 1905 upon "Materials on Commerce in the Various Depositories in London," by Dr. Albert A. Giesecke. This report is in unpublished typewritten form. A copy has been deposited in the Library of the University of Pennsylvania, Philadelphia, Pennsylvania, and another copy with the Department of History of the Carnegie Institution of Washington, Washington, D. C.

The notes and bibliography in Dr. Giesecke's volume upon *American Commercial Legislation Before 1789* (1910) will be of much assistance

in locating important documentary sources in the United States. The scholarly works by H. L. Osgood upon *The American Colonies in the Seventeenth Century* (3 vols. 1904-1907) and by George L. Beer upon *The Origins of the British Colonial System, 1578-1660* (1908), *The Old Colonial System, 1660-1754* (2 vols., 1913) and *British Colonial Policy, 1754-1765* (1907) contain a wealth of references to sources of information.

DOMESTIC COMMERCE.

The period previous to 1860 is singularly lacking in Government documents concerning domestic commerce. Not until 1844 did Congress specifically order the preparation of a report on domestic trade, and this report, *Statistics of Agriculture and Manufactures and Domestic Trade of the Several States and Territories* (House Doc. No. 35, 28 Cong., 2 sess., 1845), contained nothing on the subject of commerce except a few statistics on the trade of the Ohio canals. Hamilton's *Report on Manufactures* (American State Papers, Finance, 1, 123), Gallatin's *Report on Internal Improvements* (American State Papers, Miscellaneous, 1, 724), Gallatin's *Report on Manufactures* (American State Papers, Finance, 11, 425) and Calhoun's *Report on Internal Improvements* (*Works*, R. K. Crallé, ed. v, 40, 1856) were the most important Federal reports reflecting the state of domestic trade before the publication of the large and exceptionally valuable report of Israel D. Andrews *On the Trade and Commerce of . . . the Great Lakes and Rivers . . .* (1853). The report of the Secretary of the Treasury, *Statistics of the Foreign and Domestic Commerce of the United States* (1864), gives an excellent account of the development of the trade between the Eastern and Central States during the three decades preceding the Civil War. The twelve *Reports on Internal Commerce*, issued by the Bureau of Statistics from 1876 to 1891, contain a large amount of historical material, gathered from various sources (usually unacknowledged), the report for 1887 being especially valuable for the statistical information concerning the trade on the Mississippi River. Between 1892 and 1899 no statistics of domestic trade were compiled, except a report by George G. Tunell, *Lake Commerce* (1898). From 1900 until 1913 the *Monthly Summary of Commerce and Finance* contained in each issue statistics of the trade of important primary markets. It also contained during this time several monographs dealing with the trade in leading staples. The most important of these monographs and the date of the issue of the *Monthly Summary* were as follows: *Grain Trade of the United States* (January 1900), *Provision Trade of the United States* (February 1900), *Cotton Trade of the United States* (March 1900), *Coal Trade of the United States* (April 1900), *Iron and Steel Trade of the United States* (August 1900), *Lumber Trade of the United States* (November 1900), *Internal Commerce* (March 1901). The decennial Census Reports since 1850 have contained a large amount of useful information on domestic commerce and transportation, and the special report,

Transportation by Water (1908), gives a fair idea of the volume of the coastwise trade. The *Report of the Chief of Engineers of the United States Army* (annual), the *Report of the Commissioner of Corporations, Transportation by Water in the United States* (4 parts, 1909-1913) and the *Preliminary Report of the Inland Waterways Commission* (1908) are the other important Government documents containing material on the coastwise commerce and on lake and river trade. The publication of the Interstate Commerce Commission, *Statistics of Railways in the United States* (annual since 1887), is the leading official publication dealing with the statistics of railways and their traffic.

For the period previous to 1860 the best available sources of information concerning domestic commerce are *Niles' Register* (75 vols., 1812-1849), *Hunt's Merchants' Magazine* (63 vols., 1840-1870) and *DeBow's Review* (40 vols., 1846-1870), Hazard, *Register of Pennsylvania* (16 vols., 1828-1835), and J. D. B. DeBow, *The Industrial Resources of the Southern and Western States* (3 vols. 1852-1853).

Contemporary accounts of internal improvements usually indicate the general conditions of trade. Among the most accurate and reliable are Samuel H. Mitchell, *Compendium of all the Internal Improvements of the United States* (1835); H. S. Tanner, *A Description of the Canals and Railroads in the United States* (1840); and the description of railroads in Andrews, *Report on Lake Commerce*. Full accounts of early canals and railways may also be found in *Niles' Register* and *Hunt's Merchants' Magazine*. The leading sources of information with respect to Erie Canal traffic are *Laws of the State of New York, in Relation to the Erie and Champlain Canals, together with the Annual Reports of the Canal Commissioners* (1825) and subsequent reports of the Canal Commissioners. Among the later works on early canals and railroads the best are J. L. Ringwalt, *Development of Transportation Systems in the United States* (1888), H. V. Poor, *Sketch of the Rise and Progress of Internal Improvements* (in *Manual of Railroads*, 1881), A. L. Bishop, *The State Works of Pennsylvania* (1907), Chester Lloyd Jones, *The Economic History of the Anthracite Tide-Water Canals* (1908), G. W. Ward, *The Early Development of the Chesapeake and Ohio Canal Project* (1899), A. Barton Hepburn, *Artificial Waterways of the World* (1914), and E. J. Benton, *The Wabash Trade Route* (1903).

Descriptions by travelers and personal reminiscences afford interesting and valuable information concerning internal commerce during the years before 1860, though they must be used with discrimination on account of the personal bias of the writers. Among the most valuable of such works may be mentioned: Isaac Weld, *Travels Through the States of North America, 1795, 1796 and 1797* (1799); Timothy Dwight, *Travels in New England and New York, 1796-1815* (4 vols., 1821-22); Morris Birkbeck, *Notes on a Journey in America* (2d ed., 1818, and many other editions), Timothy Flint, *Recollections of the Past Ten Years, 1815-1825* (1826); J. Hall, *Letters from the West* (1828), *Notes on Western States* (1838), *Statistics of the West* (1836); Harriet Martineau, *Society*

in America (3 vols., 1837); Michael Chevalier, *Society, Manners and Politics in the United States, 1834-1835* (1839); J. S. Buckingham, *Eastern and Western States* (1842), *Slave States* (1842), *America, Historical, Statistical and Descriptive* (1841); F. L. Olmstead, *The Cotton Kingdom* (1861); Charles R. Weld, *A Vacation Tour in the United States and Canada* (1855); Josiah Gregg, *Commerce of the Prairies* (1845); and Sir S. Morton Peto, *Resources and Prospects of America* (1866). The best collection of accounts of travelers is R. G. Thwaites (ed.), *Early Western Travels, 1748-1846* (32 vols., 1904-1907).

The leading works on the economic and commercial development of the United States before 1860, besides contributions to the periodicals mentioned and personal narratives, were Tench Coxe, *A View of the United States of America* (1794); Adam Seybert, *Statistical Annals* (1818); Timothy Pitkin, *Statistical View of the Commerce of the United States* (1817; 2d ed., 1835); *Eighty Years Progress* by various authors (1860); Daniel Lord, *The Effect of Secession on the Commercial Relations between the North and South* (1861).

For material on domestic commerce since 1860 the best sources of information are the Government documents above referred to, reports of commercial organizations in leading cities, such as the *Annual Report of the Chicago Board of Trade* (1858 —), and *Annual Report of the New York Chamber of Commerce* (1855 —), trade publications, such as the *Commercial and Financial Chronicle* (1865 —) and the *Journal of Commerce* (1827 —).

No work dealing primarily with domestic trade has been published, though in numerous works on economics and general history discussions of the growth of domestic trade may be found. Leading works are E. L. Bogart, *Economic History of the United States* (2d ed., 1912); Katharine Coman, *Industrial History of the United States* (rev. ed., 1910); Clive Day, *History of Commerce* (1907); C. M. Depew (ed.), *One Hundred Years of American Commerce* (2 vols., 1896); Theodore Roosevelt, *Winning of the West* (4 vols., 1889-1896); J. B. McMaster, *History of the People of the United States* (8 vols., 1883-1913); and A. B. Hart (ed.), *The American Nation* (27 vols., 1904-1907). G. S. Callender, *Selections from the Economic History of the United States, 1765-1860* (1909), is an extremely valuable compilation of material on economic and commercial history before 1860.

THE FOREIGN TRADE, 1789-1914.

Much has been written upon the history of the foreign trade of the United States, but there is no single comprehensive work which covers the subject. Among the many books on commerce and industry which deal to some extent with the foreign trade of the United States are Clive Day, *History of Commerce* (1907); W. C. Webster, *General History of Commerce* (1903); John Yeats, *The Growth and Vicissitudes of Commerce* (1887); and James D. Whelpley, *The Trade of the World* (1913).

There are also various general industrial and economic histories which discuss the foreign trade of the United States, such as E. L. Bogart, *Economic History of the United States* (2d ed., 1912); A. S. Bolles, *Industrial History of the United States* (1878); R. H. I. Palgrave, *Dictionary of Political Economy* (3 vols., 1894-1899); J. R. McCulloch, *Dictionary of Commerce and Commercial Navigation* (2 vols., 1852); C. M. Depew (ed.) *One Hundred Years of American Commerce* (2 vols., 1895); and J. L. Bishop, *History of American Manufactures from 1608 to 1860* (3 vols., 1868). Some of the general histories of the United States, moreover, deal with the history of the foreign trade, particularly J. B. McMaster, *History of the People of the United States* (8 vols., 1883-1913), and to a less extent all those listed below under "General References." These being general works which discuss many phases of history, their authors do not attempt to present fully the history of the foreign trade.

The leading sources from which detailed information of the foreign trade is obtainable are the general statistical publications of the United States and public documents dealing with particular periods, with the trade with particular countries, with the foreign trade in particular industries or commodities, with the foreign trade of particular ports or sections of the country, and with the organization of the foreign trade.

The general statistical documents of the United States Government are listed in the appended bibliography, but special mention may be made of the report *Commerce and Navigation* (annual since 1822), the *Statistical Abstract of the United States* (annual since 1877), and the *Monthly Summary of Commerce and Finance* (monthly since 1893). Special attention is also called to the many statistical reports of the Bureau of Statistics and Bureau of Manufactures now consolidated in the Bureau of Foreign and Domestic Commerce of the Department of Commerce, to those of the Consular Service, of the Division of Foreign Markets, which was, in 1903, consolidated with the Bureau of Statistics in the Department of Agriculture, and of the Bureau of Navigation in the Department of Commerce.

The early foreign trade of the United States is treated in some of the works listed below in the bibliography under "Colonial Trade and Trade to 1789," but in addition there are such early works as Adam Seybert, *Statistical Annals* (1818); Timothy Pitkin, *A Statistical View of the Commerce of the United States of America* (2d ed., 1835); J. D. B. DeBow, *Industrial Resources of the Southern and Western States* (3 vols., 1852-53), and *Review* (40 vols., 1846-1870); Tench Coxe, *A View of the United States of America* (1794); *Hunt's Merchants' Magazine*; *Niles' Register*; C. H. Evans, *Statistics of Imports—Duties, 1867-1883* (1884), and *Domestic Exports from the United States to all Countries, 1789-1883* (1884); J. S. Homans, Jr., *An Historical and Statistical Account of the Foreign Commerce of the United States, 1820-1856* (1857); the report of the State Department, *Commercial Relations of the United States with*

Foreign Countries (1856-57); John McGregor, *Commercial Statistics of the United States* (3 vols., 1850); J. P. Brissot, *The Commerce of America with Europe*, etc. (1795); W. P. Stern, "The Foreign Trade of the United States, 1820-1840" (*Journal of Political Economy*, VIII, Dec., 1899); the report of the Treasury Department, *The Statistics of the Foreign and Domestic Commerce of the United States* (1864); and E. D. Fite, *Social and Industrial Conditions in the North During the Civil War* (1910).

Late periods are treated in various Government reports. Especial attention is called to the following compilations in the *Monthly Summary of Commerce and Finance: Exports of Manufactures from the United States and their Distribution by Articles and Countries, 1790-1902* (April 1903); *Exports of Domestic Manufactures and Imports of Manufacturers' Materials* (May 1903); and *American Commerce, 1821-1898* (June 1899).

The trade of the United States with numerous particular foreign countries is discussed by the Bureau of Statistics in special issues of the *Monthly Summary of Commerce and Finance*, and in special reports listed below in the bibliography under "The Foreign Trade, 1789-1914." The reports of the United States Consular Service and special reports of the United States Bureau of Manufactures likewise contain many data on the trade with particular countries. Especially valuable in this connection is the *British Board of Trade Journal* (1881 ———). There are a few secondary works dealing with the foreign trade between the United States and particular foreign countries, such as S. J. Chapman, *History of Trade Between the United Kingdom and the United States* (1899); A. Hale, *The South Americans—A Story of the South American Republics*, etc. (1907); Matias Romero, *Mexico and the United States* (1898); and F. R. Rutter, *The South American Trade of Baltimore* (Johns Hopkins University Studies, xv, No. 9, Sept. 1897).

The bibliography dealing with the foreign trade in particular industries and commodities is especially voluminous. Some of the special reports of the various departments of the Federal Government deal expressly with the foreign trade in certain commodities, and much material is to be found in the general statistical publications of the departments of the Treasury, Commerce, and Agriculture, and in those of the United States Bureau of Corporations on the beef, iron and steel, lumber, mineral oil, tobacco, and farm machinery industries. Many of the books and reports on particular industries which are listed below under "General References" in the bibliography contain important data bearing directly upon the foreign trade.

No effort is made in the list of works in the bibliography, under "The Foreign Trade, 1789-1914," to include a complete bibliography on the organization of the foreign trade, because that would necessitate a detailed bibliography on transportation, shipping, etc. Especial attention is, however, called to the report on *Cotton Exchanges* (4 parts and summary, 1908), *Transportation by Water in the United States* (4 parts, 1909-1913), and *Transportation of Petroleum* (1906), by the United States

Bureau of Corporations; the report on *Submarine and Land Telegraph Systems of the World* (1902), by the Bureau of Statistics; the reports on *Telegraph Systems in 1907* (1909) and *Transportation by Water in 1906* (1908), by the Bureau of the Census; the report on *The Investigation of Shipping Combinations*, by the House Committee on the Merchant Marine and Fisheries (4 vols., 63 Cong., 1913-14); E. K. Chatterton, *Steamships and their Story* (1910); A. H. Clark, *The Clipper Ship Era, 1843-1869* (1911); Charles S. Hill, *History of American Shipping*, etc. (1883); B. O. Hough, *Elementary Lessons in Exporting* (1909); E. R. Johnson, *Panama Canal Traffic and Tolls* (1912) and *Ocean and Inland Water Transportation* (1906); Hans Keiler, *American Shipping, Its History and Economic Conditions* (1913); W. S. Lindsay, *History of Merchant Shipping and Ancient Commerce* (4 vols., 1876); W. L. Marvin, *American Merchant Marine* (1902); Royal Meeker, *History of Shipping Subsidies* (1905); John B. Moore, *Digest of International Law* (vol. v, 1906); J. Russell Smith, *Organization of Ocean Commerce* (1905); William M. Malloy (compiler), *Treaties, Conventions, etc., Between the United States and Other Powers, 1776-1909* (2 vols. 1910); Garfield Charles (compiler), *Treaties, Conventions, etc., Between the United States and Other Powers, 1910-1913* (1913; a supplement [vol. III] to Malloy, *Treaties, Conventions, etc.*, 2 vols., 1910); G. M. Fisk, *International Commercial Policies* (1910); George Paish, *The Trade Balance of the United States* (in Publications of National Monetary Commission, 1910); and J. R. Soley, *The Maritime Industries of America* (in Shaler, *The United States of America*, ed. of 1897).

TRADE WITH NON-CONTIGUOUS POSSESSIONS.

As in the case of the foreign trade of the United States, the official source of the statistics of the early trade between the United States and its non-contiguous territories is the annual report *Commerce and Navigation of the United States*. Other Government documents containing statistics of the early trade with these possessions are the special reports contained in the *Monthly Summary of Commerce and Finance* which are listed below, the various bulletins issued by the Division of Foreign Markets of the Department of Agriculture, the special reports of the Bureau of Statistics of the Treasury Department and later of the Department of Commerce and Labor, the reports of the United States Consular Service, and the *Statistical Abstract of the United States* (annual since 1877). The principal foreign statistical documents of the early trade are the *Diplomatic and Consular Reports of Great Britain*.

The early trade of the non-contiguous territories is also described in various general works. Among these are H. H. Bancroft, *History of Alaska* (vol. XXVIII of his *History of Pacific States*, 1886), and Joseph Schafer, *The Pacific Slope* (1904). The early Hawaiian trade is described in W. D. Alexander, *Relations between the Hawaiian Islands and Spanish America in Early Times* (Papers of Hawaiian Historical

Society, No. 1, 1892); W. F. Blackman, *The Making of Hawaii*, 1899); E. J. Carpenter, *America in Hawaii*, etc. (1899); J. J. Jarvis, *History of the Hawaiian Islands* (1872); and Caspar Whitney, *Hawaiian America*, etc. (1899). The early trade of Porto Rico is described in R. A. van Middeldyk, *History of Porto Rico* (1903), and the early trade of the Philippine Islands in Blair and Robertson, *The Philippine Islands, 1493-1898* (55 vols., 1903-1909); Antonio De Morga, *History of the Philippine Islands*, etc. (2 vols., 1907); and J. Foreman, *The Philippine Islands* (3d ed., 1906).

The statistics of the later trade with the non-contiguous possessions are published in the United States Government documents mentioned in connection with their earlier trade and also in the reports of the Customs and Insular Affairs Division of the War Department, in the reports of the Census Office, of the governors of Porto Rico and Alaska and of the Philippine Commission, and in the *Monthly Summary of Commerce and Finance*. Much information is contained in G. W. Davis, *Report on the Industrial and Economic Conditions of Porto Rico* (1900); C. H. Forbes-Lindsay, *America's Insular Possessions* (2 vols., 1906); J. Foreman, *The Philippine Islands* (3d ed., 1906); W. H. Taft, *Special Report to the President on the Philippines* (1908); Thomas G. Thrum, *Hawaiian Almanac and Annual* (1884 —); and the *Report of the Alaska Railroad Commission* (1913).

FISHERIES.

The most extensive and most reliable fund of material on the history of American fisheries is to be found in the reports and bulletins of the United States Fish Commission (since 1903 the Bureau of Fisheries). A complete list of those publications may be found in the *Checklist of United States Public Documents, 1789-1909* (vol. 1, 1911, pp. 316, 317, 331-334, 406-409). Statistics of fisheries for 1880 and 1889 were included in reports of the Tenth and the Eleventh Census. The special report of the Census, *Fisheries of the United States in 1908* (1911), is especially valuable.

Lorenzo Sabine, *Report on the Principal Fisheries of the American Seas* (1853), prepared for the Treasury Department, ranks as a classic in the history of American fisheries, though it constantly shows the bias of the author in favor of fishing bounties. The work of G. Brown Goode and associates, *The Fisheries and Fishery Industries of the United States* (5 sections, 7 vols., 1884-1887), prepared through the cooperation of the Commissioner of Fisheries and the Superintendent of the Tenth Census, has been by far the best comprehensive historical work. Raymond McFarland, *History of the New England Fisheries* (1911), and Walter S. Tower, *A History of the American Whale Fishery* (1907), are important recent works on the history of the fisheries. Both have good bibliographies.

Complete details of the controversy with Great Britain concerning the fisheries of the northeastern coast may be found in *Proceedings in the North Atlantic Coast Fisheries Arbitration* (Sen. Doc. No. 870, 61 Cong., 3 sess., 12 vols., 1912). The *Proceedings of the Fur-Seal Arbitration Tribunal* (15 vols., 1895) contains an account of the fur-seal question. The convention with Great Britain, Japan, and Russia for the protection of the seal fisheries, which became effective December 15, 1911, may be found in Garfield Charles, *Treaties, Conventions, etc., of the United States, 1910-1913* (1913), and discussions of the convention are included in the *Annual Report of the Commissioner of Fisheries* (1910-1913).

GOVERNMENT AID AND COMMERCIAL POLICY.

Of the aid and regulation of commerce by governmental authority in the United States, but little has been written in a comprehensive way, and recourse must be had largely to public documents dealing with specific phases of the subject or to the annual reports of the various governmental agencies concerned, such as the Weather Bureau, Steamboat-Inspection Service, Coast and Geodetic Survey, Bureau of Lighthouses, Life-Saving Service, and Bureau of Immigration. Emory R. Johnson, *Ocean and Inland Water Transportation* (1906), contains a brief historical outline of the activities of Federal administrative agencies dealing with commerce by water, and discusses policies of governmental regulation. The book considers the causes that have led to the present condition of the American merchant marine and discusses the means of building it up.

The pamphlets published by the Bureau of Foreign and Domestic Commerce, entitled *Promotion of Commerce*, contain outlines of the commercial services performed by the various Federal offices and bureaus. The *Congressional Directory* is a useful reference-book on questions relating to the detailed organization of the Federal Government, and, beginning with the issue of 1877, has contained summary statements of the functions of the various administrative departments, bureaus, and offices. The *Checklist of United States Public Documents, 1789-1909* (vol. 1, 1911), moreover, affords a historical outline of the origin of Federal agencies of government and of changes in their organization, besides providing an invaluable bibliography of public documents. Information relating particularly to the most important of the executive departments, from the viewpoint of commerce, is contained in the publication by the Department of Commerce and Labor dealing with its *Organization and Law* (1904). John A. Fairlie, *National Administration* (1905), although written from the viewpoint of the political scientist, gives an outline of the history of the development of the different departments and contains a concise summarization of their functions.

Chester Lloyd Jones, *History of the Consular Service of the United States* (1906), is a study of the origin, history, and activities of the service, based on official records and documents. It contains a good

bibliography. Emory R. Johnson's paper on "The Early History of the Consular Service, 1776-1792" (*Political Science Quarterly*, XIII, No. 1, March 1898) gives an account of the origin of the service.

The *Annual Reports of the Commissioner of Navigation* are invaluable to the student of maritime questions, containing, as they do, not only discussions of current questions of governmental policy, but embodying also the results of investigations into the practice of this and other nations with respect to such matters as mail subsidies, shipping taxation, and registry laws. The statistical data concerning shipping and ship-building, contained in these reports, give a clear view of the progress of these important industries. The four reports on *Transportation by Water in the United States* (1809-1913), prepared by the Commissioner of Corporations, contain much historical material.

W. L. Marvin, *American Merchant Marine* (1902), is popularly written, but contains much upon both the romance and the history of the merchant marine. William Bates, *American Navigation* (1902), presents many details, but the book is poorly organized and is not so much a history as a brief advocating bounties and discriminating duties. The reports of the Lynch Committee on Causes of the Reduction of American Tonnage (House Doc. No. 28, 41 Cong., 2 sess., 1870) and of the *Merchant Marine Commission* (Sen. Doc. No. 2755, 58 Cong., 3 sess., 1905) are valuable documents dealing with the history, decline, and means of re-establishing the maritime interests of the country. A valuable monograph upon shipping and ship-building is that by J. F. Crowell, "The Shipping Industry of the United States and its Relation to the Foreign Trade" (*Monthly Summary of Commerce and Finance*, Dec. 1900). The monograph discusses American shipping policy, historically and statistically, in a scientific spirit.

Among the public documents upon waterway improvements, mention may be made of the *Preliminary Report of the Inland Waterways Commission* (1908), which contains valuable information upon current waterway projects and policies. Its appendices, particularly those relating to State canals and the present waterway system of the United States, provide a more comprehensive picture of present internal waterways than is to be found elsewhere. The *Final Report of the National Waterways Commission* (1912) discusses American waterway improvement policy in all its phases. The compilation, *Laws Relating to the Improvement of Rivers and Harbors from August 11, 1790, to March 4, 1907* (House Doc. No. 425, 58 Cong., 3 sess., 2 vols., 1907), together with the *Annual Report of the Chief of Engineers, United States Army*, and reports of Congressional committees on rivers and harbors appropriations are invaluable sources evidencing the historical progress of waterway improvements.

CLASSIFIED LIST OF BOOKS ON HISTORY OF COMMERCE.

GENERAL REFERENCES.

- ADAMS, BROOKS. *American Economic Supremacy* (1900).
- ALDRICH, N. W. Report by, from the Committee on Finance. *Wholesale Prices, Wages and Transportation* (Senate Doc. No. 1394, 52 Cong., 2 sess., 4 vols., March 3, 1893).
- ALLEN, LEWIS F. *American Cattle: Their History, Breeding and Management* (1868).
- AMERICAN COTTON MANUFACTURERS' ASSOCIATION. *Proceedings of Annual Convention* (1897-).
- AMERICAN IRON AND STEEL ASSOCIATION. *Statistics of the American and Foreign Iron Trades* (annual, 1872-).
- AMERICAN LUMBERMAN. *The Curiosity Shop, or Questions and Answers Concerning the Lumber Business* (1906).
- ANDREWS, ISRAEL D. *On the Trade and Commerce of the British North American Colonies and upon the Trade of the Great Lakes and Rivers* (House Exec. Doc. No. 136, 32 Cong., 2 sess., p.1853).
- ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE. *Federal Regulation of Industry* (July 1908), *American Business Conditions* (Nov. 1909), *American Produce Exchanges* (Sept. 1911), *The Cost of Living* (July 1913).
- AUSTIN, O. P. *Steps in the Expansion of our Territory* (1904).
- AVERY, E. M. *A History of the United States and its People* (vols. I-VII, 1904-1910).
- BABCOCK, KENDRIC C. *Rise of American Nationality* (vol. XIII of *The American Nation*, 1906).
- BAKER, RAY STANNARD. *Our New Prosperity* (1900).
- BALLAGH, JAMES C. (ed.). *Economic History of the South* (1910).
- BANCROFT, GEORGE. *History of the United States* (10 vols., last revision, 1884).
- BANCROFT, HUBERT H. *History of the Pacific States of North America* (34 vols., 1882-1890).
- BANKERS' MAGAZINE AND STATISTICAL REGISTER (New York, 1846-).
- BASSETT, JOHN S. *The Federalist System* (vol. XI of *The American Nation*, 1906).
- BATCHELDER, S. *Introduction and Early Progress of the Cotton Manufacture in the United States* (1863).
- BATES, CHARLES A. *American Supremacy* (1901).
- BATES, WILLIAM B. *American Navigation* (1902).
- BENHAM, W. H. *Trade and Trade Centers of History* (1907).
- BISHOP, J. L. *History of American Manufactures, from 1608 to 1860* (2 vols., 1864; 3 vols., 1868).
- BITUMINOUS COAL TRADE ASSOCIATION. *A Report on the Present and Future of the Bituminous Coal Trade* (1908).
- BOGART, ERNEST L. *Economic History of the United States* (2d ed., 1912).
- BOLLES, A. S. *The Financial History of the United States* (3 vols., 1879-1886).
- . *The Industrial History of the United States* (1878).
- BOSTON CHAMBER OF COMMERCE. *Annual Report* (1886-).
- BRADSTREETS. *A Journal of Trade, Finance, and Public Economy* (1885-).
- BREWER, W. H. *History of Agriculture in the United States* (U. S. Census 1880, vol. on Agriculture).
- BRIGHAM, ALBERT PERRY. *Geographic Influences in American History* (1903).
- BRISTED, JOHN. *The Resources of the United States of America* (1818).
- BROOKS, C. P. *Cotton—Its Uses, Varieties, Fibre Structure, Cultivation and Preparation for Market as an Article of Commerce* (1898).
- BROOMHALL, G. J. S. *Review of the World's Grain Trade, or the Corn Trade Year Book* (annual 1902-04); (*Annual Review of the Grain Trade*, 1910-).
- BRUCE, PHILIP A. *The Rise of the New South* (vol. XVII, *The History of North America*, 1905).
- BULLOCK, C. J. *Essays on Monetary History of the United States* (1900).
- BURKETT, C. W. *Cotton—Its Cultivation, Marketing, Manufacture, etc.* (1906).
- BURTON, THEODORE E. *Financial Crises and Periods of Industrial Depression* (1903).
- CALLENDER, GUY S. *Selected Readings in the Economic History of the United States, 1765-1860* (1909).
- CAMBRIDGE MODERN HISTORY (vol. VII, *The United States*, 1903).
- CAREY and LEA. *The Geography, History, and Statistics of America* (1823).
- CARNEGIE, ANDREW. *Triumphant Democracy or Fifty Years' March of the Republic* (1886).

- CATTERALL, RALPH C. H. *The Second Bank of the United States* (1903).
 CHADWICK, FRENCH E. *Causes of the Civil War* (vol. XIX of *The American Nation*, 1906).
 CHANNING, EDWARD. *The Jeffersonian System* (vol. XII of *The American Nation*, 1906).
 ———. *The Story of the Great Lakes* (1909).
 ———. *Student's History of the United States* (1898).
 CHICAGO BOARD OF TRADE. *Annual Report* (1858-).
 COLANGE, L. DE. *Dictionary of Commerce* (2 vols., 1880).
 COMAN, KATHARINE. *Industrial History of the United States* (1905; rev. ed., 1910).
 COOK, W. W. *The Corporation Problem* (1891).
 COOLIDGE, A. C. *The United States as a World Power* (1908).
 COOPER, THOMAS. *Some Information Respecting America, 1793* (1794).
 COPELAND, MELVIN T. *The Cotton Manufacturing Industry of the United States* (1912).
 COXE, TENCH. *A View of the United States of America* (1794).
 CROOKES, SIR WILLIAM. *The Wheat Problem* (1900).
- DARBY and DWIGHT. *A New Gazetteer of the United States of America* (1833).
 DAVIS, JOHN P. *The Union Pacific Railway* (1894).
 DAY, CLIVE. *History of Commerce* (1907).
 DEBOW, J. D. B. *DeBow's Review* (40 vols., 1846-1870).
 ———. *The Industrial Resources, etc., of the Southern and Western States* (3 vols., 1852-53).
 ———. *Statistical View of the United States, being a Compendium of the Seventh Census* (1854).
 DEFENBAUGH, JAMES E. *History of the Lumber Industry of America* (4 vols., 1906-1909).
 DEPEW, CHAUNCEY M. (ed.). *One Hundred Years of American Commerce* (2 vols., 1895).
 DEWEY, D. R. *Financial History of the United States* (1903, 4th ed., 1912).
 ———. *National Problems* (vol. XXIV of *The American Nation*, 1907).
 DONALDSON, THOMAS. *The Public Domain* (1884).
 DONDLINGER, PETER T. *The Book of Wheat* (1908).
 DONNELL, E. J. *Chronological and Statistical History of Cotton* (1872).
 DUANE, WILLIAM J. *Narrative and Correspondence concerning the Removal of the Deposits and Occurrences connected therewith* (1838).
 DU BOIS, W. E. B. *The Suppression of the African Slave Trade* (1896).
 DUNNING, WILLIAM H. *Reconstruction, Political and Economic* (vol. XXII of *The American Nation*, 1907).
 DUN'S REVIEW (weekly, 1824-).
- EDGAR, WILLIAM C. *The Story of a Grain of Wheat* (1904).
 ELLIS, ELLEN D. *An Introduction to the History of Sugar as a Commodity* (1905).
 ELSON, HENRY W. *Story of Our Country* (1910); *History of the United States of America* (5 vols., 1908).
 ELY, RICHARD T. *Monopolies and Trusts* (1900).
- FAHIE, J. J. *A History of Wireless Telegraphy* (3d ed., 1902).
 FERGUSON, A. M. J. *All About Tobacco* (1889).
 FITE, E. D. *Social and Industrial Conditions in the North during the Civil War* (1910).
 FLINT, CHARLES L. *A Hundred Years' Progress of American Agriculture* (Report of U. S. Commissioner of Agriculture, 1872, pp. 274-304).
 FRENCH, B. F. *History of the Rise and Progress of the Iron Trade of the United States* (1858).
- GALLATIN, ALBERT. *Report on Manufactures* (American State Papers, Finance, II, 425).
 ———. *Writings of Gallatin* (3 vols., edited by H. Adams, 1879).
 GANNETT, H. *The Building of a Nation: Growth, Present Condition, and Resources of the United States* (1895).
 GARNER and LODGE. *The History of the United States* (4 vols., 1906).
 GARRISON, GEORGE P. *Westward Extension* (vol. XVII of *The American Nation*, 1906).
 GRIFFIN, A. P. C. *Select List of Books, etc., Relating to Iron and Steel in Commerce* (Library of Congress, 1907).
 GRIFFIN and MEYER. *List of References on Federal Control of Commerce and Corporations* (Library of Congress, 1913).

- HADLEY, A. T. *Railroad Transportation, Its History and Its Laws* (1885).
- HAMMOND, M. B. *The Cotton Industry* (American Economic Association, new series, No. 1, 1897).
- HANEY, LEWIS H. *Business Organization and Combination* (rev. ed., 1914).
- HART, A. B. *Guide to American History* (1896).
- . *Slavery and Abolition* (vol. xvi of *The American Nation*, 1906).
- . *Social and Economic Forces in American History* (1913).
- (ed.). *Source Book of American History* (1900).
- HASSE, ADELAIDE R. *Index of Economic Material in Documents of the States of the United States* (Carnegie Inst. Wash. Pub. No. 85, 1907-1915. States thus far covered: Maine, New Hampshire, Vermont, New York, Rhode Island, Massachusetts, California, Illinois, Kentucky, Delaware, Ohio, New Jersey, Pennsylvania).
- HATFIELD, H. R. (ed.). *Lectures on Commerce* (1904).
- HAZARD, SAMUEL. *United States Commercial and Statistical Register* (6 vols., 1840-1842).
- HENRY, J. D. *History of Petroleum* (1873).
- . *Thirty-five Years of Oil Transportation—The Evolution of the Tank Steamer* (1907).
- HOLDSWORTH, J. T. *The First Bank of the United States* (Publications, National Monetary Commission, 1910).
- HOLMES, GEORGE K. *Progress of Agriculture in the United States* (Report, Department of Agriculture, 1899).
- HOSMER, JAMES K. *The Appeal to Arms* (vol. xx of *The American Nation*, 1907).
- . *The Louisiana Purchase* (1902).
- . *Outcome of the Civil War* (vol. xxi of *The American Nation*, 1907).
- HUEBNER, G. G. *Trade, Transportation and Commerce* (*American Year Book*, 1911, 1912, 1913).
- HUNT, THOMAS F. *The Cereals in America* (1904).
- HUNT'S MERCHANTS' MAGAZINE AND COMMERCIAL REVIEW (63 vols., 1840-1870).
- INGALLS, W. R. (formerly R. P. Rotherwell). *The Mineral Industry, Its Statistics, Technology and Trade* (annual, 1892-).
- (ed.). *The Mineral Industry* (vol. xiv of *Engineering and Mining Journal*, 1906).
- JACOBSTEIN, MEYER. *The Tobacco Industry in the United States* (Columbia University Studies, xxvi, No. 3, 1907).
- JENKS, J. W. *The Trust Problem* (1903).
- JOHNSON, EMORY R. *American Railway Transportation* (1903, rev. ed., 1908).
- . *Ocean and Inland Water Transportation* (1906).
- . *Inland Waterways: Their Relation to Transportation* (Supplement to *Annals of American Academy of Political and Social Science*, iv, 1893).
- JOHNSON, J. F. W. *Notes on North America; Agricultural, Economical and Social* (2 vols., 1851).
- KNOOP, DOUGLAS. *American Business Enterprise* (1907).
- LAMB'S TEXTILE INDUSTRIES OF THE UNITED STATES (editor-in-chief, John H. Brown, vol. 1, 1911).
- LARNED, J. N. *Literature of American History* (1902).
- LATANE, JOHN H. *America the World Power* (vol. xxv of *The American Nation*, 1907).
- LAUGHLIN, J. L. *Industrial America* (1906).
- LAUGHLIN and WILLIS. *Reciprocity* (1903).
- LAWSON, W. R. *American Industrial Problems* (1903).
- LEE and THORPE (ed.). *The History of North America* (20 vols., 1903-1907).
- LEROY-BEAULIEU, PIERRE. *The United States in the Twentieth Century* (translated by H. Addington Bruce, 1906).
- LEWIS, M. E. *The Grain Business as a Profession* (1910).
- LEWIS and CLARK. *Journals, 1804-1806* (edited by R. G. Thwaites, 1904-1905).
- LOSSING, J. B. *History of American Industries* (1878).
- LYON and MONTGOMERY. *Examining and Grading Grain* (1907).
- MCCULLOCH, J. R. *A Dictionary, Practical, Theoretical and Historical, of Commerce and Commercial Navigation* (edited by Henry Vethake, 2 vols., 1852).
- MCDONALD, WILLIAM. *Jacksonian Democracy* (vol. xv of *The American Nation*, 1906).
- . *Documentary Source Book of American History* (1908).
- MACGREGOR, JOHN. *Commercial Statistics of the United States* (3 vols., 1850).
- MCMASTER, J. B. *A History of the People of the United States* (8 vols., 1883-1913).

- MANUFACTURERS RECORD (weekly, 1882-).
- MARVIN, W. L. *The American Merchant Marine* (1902).
- MEEKER, ROYAL. *History of Shipping Subsidies* (American Economic Association Publications, 3d series, vi, No. 3, 1905).
- MEYER, B. H. *Railway Legislation in the United States* (1903).
- MONCRIEFF, A. R. H. *The World of Today* (6 vols., 1905).
- MOORE, JOHN B. *Digest of International Law* (House Doc. No. 551, 56 Cong., 2 sess., 7 vols. and index vol., 1906).
- . *History and Digest of the International Arbitrations to which the United States has been a Party* (House Misc. Doc. No. 212, 53 Cong., 2 sess., 6 vols. 1898).
- MORRISON, JOHN H. *History of American Steam Navigation* (1903).
- MORSE, EDWARD L. *Samuel F. B. Morse, His Letters and Journals* (2 vols., 1914).
- MYRICK, HERBERT. *The American Sugar Industry* (1899).
- (ed.). *The Book of Corn* (1903).
- MYRICK and KILLIBREW. *Tobacco Leaf* (1903).
- NATIONAL ASSOCIATION OF WOOL MANUFACTURERS. *Bulletin* (quarterly, 1869-).
- NILES' WEEKLY REGISTER, NILES' NATIONAL REGISTER (75 vols., 1812-1849).
- NEW YORK CHAMBER OF COMMERCE. *Annual Report* (1858-).
- NEW YORK PRODUCE EXCHANGE. *Annual Report* (1868-).
- NORTH, S. N. D. *The Wool Book* (1908).
- OBERHOLTZER, E. P. *Philadelphia—A History of the City and Its People* (4 vols.).
- PALGRAVE, R. H. I. *Dictionary of Political Economy* (3 vols., 1894-1899).
- PITKIN, TIMOTHY. *A Political and Civil History of the United States of America* (2 vols., 1835).
- . *Statistical View of the Commerce of the United States, etc.*, (1817; 2d ed., 1835).
- PHILADELPHIA COMMERCIAL EXCHANGE, *Annual Report* (1854-).
- POOR, H. V. *Manual of Railroads in the United States* (1868-).
- POORE, BEN: PERLEY. *History of Agriculture in the United States* (Report of U. S. Commissioner of Agriculture, 1866, 498).
- POPFLEWELL, FRANK. *Some Modern Conditions and Recent Developments in Iron and Steel Production in America* (1906).
- PROCEEDINGS OF CONGRESS:
Annals of Congress, 1789-1824 (42 vols.).
Register of Debates, 1824-1837 (14 vols.).
Congressional Globe, 1833-1873 (46 vols.).
Congressional Record, 1873- .
- QUAINTANCE, H. W. *The Influence of Farm Machinery on Production and Labor* (American Economic Association Publications, 3d series, v, No. 4, 1904).
- RHODES, J. F. *A History of the United States, from the Compromise of 1850* (7 vols., 1893-1906).
- RIES, HEINRICH. *Economic Geology of the United States* (1905).
- RIPLEY, WILLIAM Z. *Railroads, Finance and Organization* (1915).
- . *Railroads, Rates and Regulations* (1912).
- (ed.). *Railway Problems* (1907).
- (ed.). *Trusts, Pools and Corporations* (1905).
- ROBERTS, PETER. *The Anthracite Coal Industry* (1901).
- ROBINSON, E. V. *Commercial Geography* (1910).
- ROGERS, J. M. *The Development of the North Since the Civil War* (1906).
- SAN FRANCISCO CHAMBER OF COMMERCE. *Annual Report* (1851-).
- SAUERBECK, AUGUSTUS (compiler). *The Course of Average Prices of General Commodities in England* (London, 1908).
- SCHAFER, JOSEPH. *History of the Pacific Northwest* (1905).
- . *The Pacific Slope and Alaska* (1904).
- SCHARF and WESTCOTT. *History of Philadelphia* (3 vols., 1884).
- SCHOULER, J. *History of the United States of America* (6 vols., 1880-1889).
- SCRIBNER'S STATISTICAL ATLAS OF THE UNITED STATES (1883).
- SCRIVENOR, H. *A Comprehensive History of the Iron Trade, etc.* (1841 and 1854).
- SEMPLER, ELLEN C. *American History and its Geographic Conditions* (1903).
- SKYBERT, ADAM. *Statistical Annals, etc.* (1818).

- SHALER, N. S. *American Highways* (1896).
 ——— (ed.). *The United States of America* (2 vols., 1894).
 SHAW, J. T. *The Wool Trade of the United States, Its Rise and Progress in Boston* (Sen. Doc No. 70, 61 Cong., 1 sess., 1909).
 SHEPPARDSON, A. B. *Cotton Facts* (annual, 1841-).
 ———. *Cotton Futures* (1911).
 SILK ASSOCIATION OF AMERICA. *Annual Report* (1872-).
 SMART, WILLIAM. *Economic Annals of the 19th Century, 1802-1820* (1910).
 SMITH, J. RUSSELL. *The Ocean Carrier* (1908).
 ———. *The Story of Iron and Steel* (1908).
 SMITH, ROLLIN E. *Wheat Fields and Markets of the World* (1908).
 SMITH, THEODORE C. *Parties and Slavery* (vol. XVIII of *The American Nation*, 1906).
 SPARKS, EDWIN E. *National Development* (vol. XXIII of *The American Nation*, 1907).
 SPEARS, J. R. *The American Slave Trade* (1900).
 SPICER, A. D. *The Paper Trade* (1907).
 STANWOOD, EDWARD. *American Tariff Controversies in the Nineteenth Century* (2 vols., 1903).
 STEVENS, HORACE J. (changed to W. H. Weed in 1912). *The Copper Handbook* (periodically 1901-).
 SULLIVAN, J. W. *Markets for the People* (1913).
 SURFACE, GEORGE T. *The Story of Sugar* (1910).
 SWANK, J. M. *American Iron Trade in 1876* (1876).
 ———. *History of the Manufacture of Iron in all Ages* (1884, 2d ed., 1892; see also Tenth Census, II, 769-890).
 ———. *Iron and Steel at the Close of the Nineteenth Century* (Geological Survey, *Mineral Resources of the United States*, 1900, 1901).
 ———. *Statistics of the Iron and Steel Production of the United States* (1880).
 TARBELL, IDA M. *History of the Standard Oil Company* (2 vols., 1904).
 TARIFF BOARD, UNITED STATES. *Cotton Textiles* (1912).
 ———. *Wool and Manufactures of Wool* (2 vols., 1912).
 TAUSSIG, F. W. *Tariff History of the United States* (6th ed., 1914).
 ——— (ed.). *State Papers and Speeches on the Tariff* (1892).
 TERRY, HUBERT L. *India Rubber and its Manufacture* (1908).
 TOMPKINS, D. A. *Cotton Mill—Commercial Features* (1899).
 TOWER, WALTER S. *The Story of Oil* (1909).
 TROTTER, SPENCER. *The Geography of Commerce* (1903).
 TUCKER, GEORGE. *Progress of the United States in Wealth and Population* (1843).
 TURNER, FREDERICK J. *Rise of the New West* (vol. XIV of *The American Nation*, 1906).
- UNITED STATES:
 Congress—
 House Reports—
 Proceedings of the Committee on the Merchant Marine and Fisheries in the Investigation of Shipping Combinations (4 vols., 63 Cong., 1913-14).
 Senate Reports—
 Report of Select Committee on Transportation Routes to the Seaboard (No. 307, 43 Cong., 1 sess., III, parts I and II, 1874).
 Departmental Publications—
 Department of Agriculture—
 Secretary, *Annual Report* (1889-). Annual report on agriculture, published as part of *Report of Commissioner of Patents*, 1837-1862; *Annual Report of Commissioner of Agriculture*, 1862-1888.
 ———. *Year Book* (1894-).
 Forest Service (Division of Forestry, 1880-1901; Bureau of Forestry, 1901-1905). General publications and *Bulletins*.
 Department of Commerce—
 Bureau of the Census (Census Office, 1790-1903. Connected with Department of State, 1790-1849; with Department of Interior, 1849-1903; with Department of Commerce and Labor, 1903-1913). (*Reports*, (final volumes) decennial since 1790).

UNITED STATES—Continued.

Departmental Publications—Continued.

Department of Commerce—Continued.

Bureau of the Census, etc.—Continued.

*Special Reports—especially—**Manufactures*, 1905 (4 parts, 1907-08).*Telegraphs and Telephones in 1902* (1906).*Transportation by Water in 1906* (1908).

Bureau of Corporations (connected with Department of Commerce and Labor, 1903-1913).

Reports of Commissioner of Corporations, as follows:

Beef Industry (1905).*Cotton Exchanges* (4 parts and summary, 1908).*Cotton Tare* (1912).*The International Harvester Company* (1913).*The Lumber Industry* (parts 1 to 3, 1913-1914).*Petroleum Industry* (3 parts, 1907-1909).*The Steel Industry* (3 parts, 1911-1913).*Tobacco Industry* (4 parts, 1909-1911).*Transportation of Petroleum* (1906).*Transportation by Water in the United States* (4 parts, 1909-1913).

Bureau of Foreign and Domestic Commerce (in Department of Commerce and Labor, 1912-1913).

Foreign Commerce and Navigation of the United States (annual, 1820- .

Prepared from 1820 to 1866 in office of the Register of the Treasury; from 1867 to 1912 by the Bureau of Statistics, which was connected with the Department of the Treasury, 1866-1903; with the Department of Commerce and Labor, 1903-1912. Part 2 of this report in 1876, 1880, 1882, 1886, 1887, 1888, 1890, and 1891, and part 3 in 1878 and 1884, were on Internal Commerce).

— *Monthly Summary of Commerce and Finance* (monthly, 1896- . Prepared, from 1896 to June 1912, by Bureau of Statistics, which was connected with the Department of Treasury, 1866-1903; with Department of Commerce and Labor, 1903-1912. With the issue of July 1914 the title became *Monthly Summary of the Foreign Commerce of the United States*. The *Monthly Summary of Commerce and Finance* was preceded by monthly reports of the director (later chief) of the Bureau of Statistics (1867-1875), the *Summary Statement of Imports and Exports* (monthly, July 1875-December 1894) and *Finance, Commerce and Immigration* (monthly, January 1895-December 1895). The following issues containing monographs as indicated are of especial value:

The Grain Trade of the United States (Jan. 1900).*The Provision Trade of the United States* (Feb. 1900).*The Cotton Trade of the United States* (March 1900).*The Coal Trade of the United States* (April 1900).*The Iron and Steel Trade of the United States* (Aug. 1900).*The Lumber Trade of the United States* (Nov. 1900).*The Shipping Industry of the United States* (Dec. 1900).*The Territorial Expansion of the United States* (Sept. 1901).*The World's Sugar Production and Consumption* (Jan. 1902).*Progress of the United States in its Material Industries, 1800-1900* (Jan. 1902).*Submarine and Land Telegraph Systems of the World* (July 1902).*Statistical Abstract of the United States* (annual, 1878- . Prepared by Bureau of Statistics, 1878-1912).

Bureau of Navigation (in Department of Treasury, 1884-1903; in Department of Commerce and Labor, 1903-1913).

Navigation Laws of the United States (1911). Supplements in 1912 and 1913.

Department of the Interior—

Geological Survey. *Mineral Resources of the United States* (annual, 1883- ; as part of the *Annual Report of the Geological Survey*, 1895-1900).

UNITED STATES—Continued.

Departmental Publications—Continued.

Department of the Treasury:

Secretary, *Statistics of Foreign and Domestic Commerce of the United States, embracing Historical Review and Analysis*, etc. (1864).

Government Printing Office—

Superintendent of Documents, *Checklist of United States Public Documents, 1789-1909* (vol. 1, 1911).

———. *List of Publications Relating to Interstate Commerce, Roads, Inland Waterways, Merchant Marine*, etc. (1910).

Industrial Commission—

Reports (19 vols., 1900-1902). Especially vol. vi, *Distribution of Farm Products*; vols. iv and ix, *Transportation*; and vol. xix, *Final Report*.

Inland Waterways Commission—

Preliminary Report (Senate Doc. No. 325, 60 Cong., 1 sess., 1908).

National Waterways Commission—

Final Report (Senate Doc. No. 469, 62 Cong., 2 sess., 1912).

VOGT, PAUL L. *The Sugar Refining Industry in the United States* (Publications, University of Pennsylvania, 1908).

WARDEN, DAVID B. *A Statistical, Political and Historical Account of the United States* (3 vols., 1819).

WATTERSON and VAN ZANDT. *Tabular Statistical View of the United States, 1818-1827* (1829).

WEBSTER, W. C. *A General History of Commerce* (1903).

WEEKS, JOSEPH D. *Tin and Tin Plate, Their History, Production and Statistics* (1892).

WHITE, HORACE. *Money and Banking* (1896, 3d. ed., 1908).

WHITESHOT, CHARLES A. *The Oil Well Drillers. A History of the World's Greatest Enterprise, the Oil Industry* (1905).

WILLIAMS, G. W. *History of the Negro Race in America, 1619-1880* (1883).

WILSON, J. G. *Memorial History of the City of New York* (4 vols., 1891-1893).

WILSON, WOODROW. *The History of the American People* (5 vols., 1902).

WINDOM, WILLIAM. *Report of Select Committee on Transportation Routes to the Seaboard* (Sen. Doc. No. 307, 43 Cong., 1 sess., III, parts I and II, 1874).

WING, J. E. *Sheep Farming in America* (1907).

WINSOR, JUSTIN. *Memorial History of Boston* (4 vols., 1880-1882).

——— (ed.). *Narrative and Critical History of America* (8 vols. 1884-1889).

WRIGHT, CARROLL D. *The Industrial Evolution of the United States* (1907).

———. *Report on the Factory System* (Tenth Census, II, 1883, p. 529).

WRIGHT, CHESTER W. *Wool Growing and the Tariff* (1910).

WYCKOFF, WILLIAM C. *The Silk Goods of America* (1879).

———. *Silk Manufacturers in the United States* (1883).

WOODBURY, LEVI. *A Report on the Cultivation, Manufacture and Foreign Trade of Cotton* (Exec. Doc. No. 146, 24 Cong., 1 sess., 1836).

WOOLMAN and MCGOWAN. *Textiles. A Handbook for the Student and the Consumer* (1913).

YOUNG, T. M. *The American Cotton Industry* (1903).

COLONIAL TRADE AND TRADE TO 1789.

AMERICAN HISTORICAL ASSOCIATION. *Annual Report for the Year 1893*.

ANDERSON, A. *An Historical and Chronological Deduction of the Origin of Commerce* (4 vols., 1787-1789).

ANDREWS, CHARLES M. *British Committees, Commissions and Councils of Trade and Plantations, 1622-1675* (Johns Hopkins University Studies, xxvi, 1908).

———. "Colonial Commerce," in *American Historical Review*, xx, October 1914.

———. *The Colonial Period* (1912).

———. *Colonial Self-Government* (vol. v of *The American Nation*, 1904).

- ANDREWS, CHARLES M. *Guide to the Materials for American History, to 1783, in the Public Record Office of Great Britain* (Carnegie Inst. Wash. Pub. No. 90A, 2 vols., 1912, 1914).
- . "Materials in British Archives for American Colonial History," in *American Historical Review*, x (1904).
- ANDREWS and DAVENPORT. *Guide to the Manuscript Materials for the History of the United States, to 1783, in the British Museum, in Minor London Archives, and in Libraries of Oxford and Cambridge* (Carnegie Inst. Wash. Pub. No. 90, 1908).
- ARNOLD, B. W. *History of Tobacco Industry in Virginia* (Johns Hopkins University Studies, xv, Nos. 1 and 2, 1897).
- ARNOLD, S. G. *History of the State of Rhode Island, 1636-1790* (2 vols., 1894).
- ASHLEY, W. J. "The Commercial Legislation of England and the American Colonies, 1660-1760," in *Quarterly Journal of Economics*, vol. xiv, Nov. 1899.
- BACON, E. M. *English Voyages of Adventure and Discovery* (1908).
- BEARD, C. A. *An Economic Interpretation of the Constitution of the United States* (1913).
- BEER, GEORGE L. *British Colonial Policy, 1754-1765* (1907).
- . *The Commercial Policy of England toward the American Colonies* (Columbia College Studies, III, No. 2, 1893).
- . *The Old Colonial System, 1660-1754* (2 vols., 1913).
- . *The Origins of the British Colonial System, 1578-1660* (1908).
- BERNARD, SIR FRANCIS. *Select Letters on the Trade and Government of America* (1764).
- BOARD OF TRADE JOURNALS, 1675-1782 (90 vols.; in Library, Historical Society of Pennsylvania, Philadelphia).
- BOARD OF TRADE PAPERS. *Plantations General, 1680-1780* (31 vols.; in Library, Historical Society of Pennsylvania, Philadelphia).
- . *Proprieties, 1697-1776* (24 vols.; in Library, Historical Society of Pennsylvania, Philadelphia).
- BOLLES, ALBERT S. *Pennsylvania—Province and State, 1609-1790* (1899).
- BOURNE, E. G. *Spain in America* (vol. III of *The American Nation*, 1904).
- BRADFORD, W. *History of Plymouth Plantation* (ed. by W. C. Ford, 2 vols., 1913).
- BRIGHAM, C. S. (ed.). *British Royal Proclamations relating to America, 1603-1783* (Transactions and Collections, American Antiquarian Society, 1911).
- BRISSOT, J. P. *New Travels in the United States of America, Performed in 1788* (1792).
- BRODHEAD, JOHN R. *History of the State of New York, 1609-1664* (2 vols., 1853, 1871).
- BROWN, ALEXANDER. *Genesis of the United States* (2 vols., 1890, 1891).
- BROWN, JOHN. *The Pilgrim Fathers of New England and their Puritan Successors* (4th ed., 1897).
- BRUCE, P. A. *Economic History of Virginia in the Seventeenth Century* (2 vols., 1896, 1907).
- . *Institutional History of Virginia in the Seventeenth Century* (2 vols., 1910).
- BURKE, EDMUND. *Works* (Bohn's British Classics, 8 vols., 1868-1873).
- CALENDAR OF STATE PAPERS. *Colonial Series, America and West Indies, 1574-1701* (vols. I-XIX, 1860-1910).
- CANDLER, A. D. (ed.). *Colonial Records of Georgia, 1732-1774* (17 vols., 1904-1908).
- CHALMERS, GEORGE. *Introduction to the History of the Revolt of the American Colonies, etc.* (2 vols., 1845).
- . *Political Annals of the Present United Colonies from their Settlement to the Peace of 1763* (1780).
- CHAMPION, RICHARD. *Considerations on the Present Situation of Great Britain and the United States of America, etc.* (1784).
- CHANNING, EDWARD. *A History of the United States* (vols. I-III, 1907-1912).
- CHATTERTON, E. K. *Ships and Ways of Other Days* (1913).
- CHEYNEY, EDWARD P. *European Background of American History* (vol. I of *The American Nation*, 1904).
- COMMERCE. *The United States with Europe and the West Indies* (1783).
- THE COMMERCE OF RHODE ISLAND. Vol. I (Massachusetts Historical Society Collections, 7th series, IX, 1914).
- CONSIDERATIONS ON THE DISPUTE NOW BEFORE THE HOUSE OF COMMONS, *between the British Southern and Northern Plantations in America* (a letter, 1731).
- CORNEWALL-JONES, R. J. *The British Merchant Service, etc.* (1898).
- CRAIK, G. L. *The History of British Commerce, from the Earliest Times* (3 vols., 1844).

- DAVIS, A. M. *Currency and Banking in the Province of Massachusetts Bay* (Publications American Economic Association, 3d series, 1, No. 4, 1900).
- DAVIS, JOHN P. *Corporations—A Study of the Origin of Great Combinations* (2 vols.; vol. II, chap. 6, "Colonial Companies," 1905).
- DAVIS, WILLIAM M. *The International Geography* (edited by H. R. Mill; chap. XXXVII on "The Continent of North America," chap. XI, "The United States," 1899, 5th ed., 1912).
- DAVIS, WILLIAM T. (ed.). *Bradford's History of Plymouth Plantation, 1606-1646* (1908).
- DEFOE, DANIEL. *A Plan of English Commerce, Being a Complete Prospect of the Trade of this Nation* (1728; 2d ed., 1730).
- DICKINSON, JOHN. *Letters from a Farmer in Pennsylvania to the Inhabitants of the British Colonies* (1769).
- . *Political Writings* (2 vols., 1801).
- A DISCOURSE ON TRADE; MORE PARTICULARLY ON SUGAR AND TOBACCO (for J. Roberts, 1733).
- DOYLE, J. A. *History of the English Colonies in America* (5 vols., 1882-1907).
- EDWARDS, BRYAN. *The History, Civil and Commercial, of the British Colonies in the West Indies* (4 vols., 1806).
- EGERTON, H. E. *A Short History of British Colonial Policy* (1897).
- EVANS, CHARLES H. *Exports, Domestic and Foreign, from American Colonies to Great Britain, 1697-1789* (1884).
- FARRAND, L. *Basis of American History* (vol. II of *The American Nation*, 1904).
- FIELD, EDWARD. *The State of Rhode Island and Providence Plantations at the End of the Century* (3 vols., 1902).
- FISHER, E. J. *New Jersey as a Royal Province, 1738-1776* (Columbia University Studies, XLI, 1911).
- FISHER, G. P. *Colonial Era* (1892).
- FISHER, S. G. *Pennsylvania, Colony and Commonwealth* (1897).
- FISHER, W. C. *American Trade Regulations before 1789* (Papers American Historical Association, III, 1889).
- FISKE, JOHN. *Old Virginia and her Neighbors* (2 vols., 1897).
- FRANKLIN, BENJAMIN. *The Interest of Great Britain Considered with Regard to the Colonies* (1761).
- FORCE, PETER. *Tracts and other Papers Relating Principally to the Colonies of North America* (4 vols., 1836-1846).
- FRY, WILLIAM H. *New Hampshire as a Royal Province* (Columbia University Studies, XXIX, 1908).
- GEE, JOSHUA. *The Trade and Navigation of Great Britain Considered* (1729).
- A GENERAL TREATISE OF NAVAL TRADE AND COMMERCE (2 vols.; for E. Symon and J. Crockett, 1738).
- GIESECKE, A. A. *American Commercial Legislation Before 1789* (Publications, University of Pennsylvania, 1910).
- GRAY, L. C. *The Origin and Development of the Plantation System in the Colonial Period* (1913).
- GREENE, E. B. *Provincial America, 1690-1740* (vol. VI of *The American Nation*, 1905).
- GREENE, G. W. *A Short History of Rhode Island, 1631-1875* (1877).
- GOODWIN, JOHN A. *The Pilgrim Republic* (edition of 1895).
- HAKLUYT, RICHARD. *The Principal Navigations, Voyages, Traffiques and Discoveries of the English Nation* (12 vols., 1903-1905).
- HALE, ENOCH. *Commerce of the United States* (Hunt's Merchants' Magazine, XXX-XXXIV).
- HALL, C. C. (ed.). *Narratives of Early Maryland, 1633-1684* (1910).
- HEWINS, W. A. S. *English Trade and Finance* (1892).
- HOSMER, JAMES K. (ed.). *Winthrop's Journal* (2 vols., 1908).
- HOWARD, GEORGE E. *Preliminaries of the Revolution* (vol. VIII of *The American Nation*, 1905).
- HOWE, DANIEL W. *The Puritan Republic* (1899).
- THE IMPORTANCE OF BRITISH PLANTATIONS (1731).
- JAMESON, JAMES F. (ed.). *Narratives of New Netherlands, 1609-1664* (1909).
- . *William Usselinx* (Papers of American Historical Association, II, 1888).

- JONES, B. B. *The Colonization of New England* (1904).
 JONES, F. R. *The Colonization of the Middle States and Maryland* (1904).
- KALM, PETER. *Travels into North America, 1748-49* (translated by J. R. Foster, 3 vols., 1770-1771).
 KELLOGG, LOUISE P. "The American Colonial Charter," in *Annual Report of American Historical Association for 1903*, vol. 1.
- LEVI, LEONE. *The History of British Commerce, 1763-1878* (1880).
 LINDSAY, W. S. *History of Merchant Shipping and Ancient Commerce* (4 vols., 1876).
 LODGE, H. C. *A Short History of the English Colonies in America* (1881).
- MCCLELLAN, WILLIAM S. *Smuggling in the American Colonies* (1912).
 MACDONALD, WILLIAM (ed.). *Select Charters and other Documents Illustrative of American History, 1606-1775* (1899, 1904).
 McLAUGHLIN, ANDREW C. *The Confederation and the Constitution* (vol. x of *The American Nation*, 1905).
 MACPHERSON, DAVID. *Annals of Commerce, Manufactures, Fisheries and Navigation* (4 vols., 1805).
 MARKS, MARY A. M. *England and America, 1763-1783* (2 vols., 1907).
 MEASE, JAMES. *Picture of Philadelphia* (an account of its origin, increase and improvements in arts, sciences, manufactures, commerce and revenue, 1811).
 MERENESS, N. D. *Maryland as Proprietary Province* (1901).
 MINES, S. L. *Colbert's West India Policy* (1912).
 MOORE, J. R. H. *An Industrial History of the American People* (1913).
 MORRIS, MARGARET SHOVE. *Colonial Trade of Maryland, 1689-1715* (1914).
 MYERS, A. C. (ed.). *Narratives of Early Pennsylvania, West New Jersey and Delaware, 1630-1707* (1912).
- O'CALLAGHAN, E. B. *Documentary History of the State of New York* (4 vols., 1849-51).
 O'CALLAGHAN and FERNOW (eds.). *Documents Relative to the Colonial History of the State of New York* (15 vols., 1856-1887).
- OPINIONS ON INTERESTING SUBJECTS OF PUBLIC LAW AND COMMERCIAL POLICY ARISING FROM AMERICAN INDEPENDENCE (1785).
- OSGOOD, H. L. *The American Colonies in the Seventeenth Century* (3 vols., 1904-1907).
 ———. "The Colonial Corporation," in *Political Science Quarterly*, xi, 1896.
 OSGOOD and BATCHELDER. *Historical Sketch of Salem*.
- PAGE, T. N. *The Old Dominion, Her Making and Her Manners* (1908).
 PAINE, R. D. *The Ships and Sailors of Old Salem* (1912).
 PALFREY, JOHN G. *A Compendious History of New England from the Discovery by Europeans to the First General Congress of the Anglo-American Colonies* (4 vols., 1873).
 PAULLIN and PAXSON. *Guide to the Materials in London Archives for the History of the United States since 1783* (Carnegie Inst. Wash. Pub. No. 908, 1914).
 PEABODY, R. E. *Merchant Venturers of Old Salem* (1913).
 PEARSE, J. B. *A Concise History of the Iron Manufacture of the American Colonies up to the Revolution, and of Pennsylvania until the Present Time* (1876).
 PHILLIPP, HENRY. *Historical Sketches of the Paper Currency of the American Colonies* (2 vols., 1865-66).
 POSTLETHWAYT, MALACHY. *Britain's Commercial Interest Explained and Improved, etc.* (2 vols., 1747).
 ———. *The Universal Dictionary of Trade and Commerce, etc.* (1766).
 POWELL, L. P. (ed.). *Historic Towns of New England* (1898).
 POWNALL, THOMAS. *The Administration of the Colonies* (1764).
 PURCHAS, SAMUEL. *Hakluytus Posthumus or Purchas His Pilgrimes* (20 vols., 1905-1907).
- RIPLEY, W. Z. *Financial History of Virginia, 1600-1776* (Columbia University Studies, iv, No. 1, 1893).
 ROOT, W. T. *The Relations of Pennsylvania with the British Government, 1696-1765* (Publications, University of Pennsylvania, 1912).
- SALLEY, ALEXANDER S. (ed.). *Narratives of Early Carolina, 1650-1708* (1911).

- SAUNDERS, W. S. (ed.). *Colonial Records of North Carolina, 1662-1776* (10 vols., 1866-1905).
- SCOTT, W. R. *Constitution and Finances of English, Scotch and Irish Joint-Stock Companies in 1720* (3 vols., 1910-1912).
- SELECT CHARTERS OF TRADING COMPANIES, 1530-1707 (1913).
- SHEFFIELD, LORD JOHN. *Observations on the Commerce of the American States* (6th ed. 1784).
- SKETCH OF THE RESOURCES OF THE CITY OF NEW YORK FROM THE FOUNDATION OF THE CITY TO THE DATE OF THE LATEST STATISTICAL ACCOUNTS (1827).
- SMITH, CAPTAIN JOHN. *Works* (edited by Edward Arber, 1884).
- SMITH, WILLIAM. *History of the First Discovery and Settlement of Virginia* (Sabin's reprint, 1865).
- SOCIETY OF SHIPOWNERS OF GREAT BRITAIN. *Collection of Interesting and Important Reports and Papers on the Navigation and Trade of Great Britain, etc.* (1807).
- SUMNER, WILLIAM G. *The Financier and the Finances of the American Revolution* (1891).
- TANNER, E. P. *The Province of New Jersey, 1664-1738* (Columbia University Studies, xxx, 1908).
- THWAITES, R. G. *The Colonies, 1492-1750* (Epochs of American History, rev. ed., 1897).
- TRUMBULL, BENJAMIN. *A Complete History of Connecticut, 1630 to the Close of the Indian Wars* (2 vols., 1898).
- TRUMBULL and HOADLY (compilers). *Public Records of the Colony of Connecticut* (15 vols., 1850-1890).
- TYLER, L. G. *England in America* (vol. IV of *The American Nation*, 1904).
- (ed.). *Narratives of Early Virginia, 1606-1625* (1907).
- VAN TYNE, CLAUDE H. *The American Revolution* (vol. IX of *The American Nation*, 1905).
- WEEDEN, WM. B. *Economic and Social History of New England* (2 vols., 1890-1891).
- WESTERFIELD, R. B. *Commercial Organization in England, 1660-1760* (1913).
- WHITWORTH, SIR CHARLES. *State of Trade of Great Britain in its Imports and Exports, Progressively from the Year 1697, etc.* (the tables in the copy in Library of Congress, Washington, are continued, in manuscript, from 1772 to 1801; 1776).
- WOOD, W. *A Survey of Trade, together with Considerations on our Money and Bullion* (1718).

DOMESTIC TRADE.

- ALLEN, THOMAS. *The Commerce and Navigation of the Valley of the Mississippi* (1847).
- AMERICAN RAILROAD ENGINEER (1865).
- THE AMERICAN RAILWAY. By various authors (1899).
- ARMROYD, GEORGE. *A Connected View of the Whole Internal Navigation of the United States* (1826).
- BENTON, E. J. *The Wabash Trade Route* (Johns Hopkins University Studies, xxi, 1903).
- BIRKBECK, MORRIS. *Letters from Illinois* (1818).
- . *Notes on a Journey in America* (1817; 2d ed., 1818).
- BISHOP, A. L. *The State Works of Pennsylvania* (1907).
- BLOWE, DANIEL. *A Geographical, Historical, Commercial, and Agricultural View of the United States of America* (1820).
- BRADBURY, JOHN. *Travels in the Interior of North America in the Years 1809, 1810, and 1811, etc.* (1817).
- BROWN, WILLIAM H. *History of the First Locomotive in America* (1871).
- BUCKINGHAM, J. S. *America: Historical, Statistical and Descriptive* (1841).
- . *Eastern and Western States* (1842).
- . *Slave States* (1842).
- CHAPIN, WILLIAM. *A Complete Reference Gazetteer of the United States* (1839).
- CHEVALIER, MICHEL. *Society, Manners and Politics in the United States, 1834-35* (1839).
- CHITTENDEN, H. M. *American Fur Trade in the Far West* (3 vols., 1902).
- CHRISTY, DAVID. *Cotton is King, or Slavery in the Light of Political Economy* (1860).
- CLAY, HENRY. *Works* (ed. by Calvin Colton, 6 vols., 1863).
- COLLINS, W. H. *The Domestic Slave Trade in the United States* (1904).
- COMAN, KATHARINE. *The Economic Beginnings of the Far West* (1912).
- COMMERCIAL AND FINANCIAL CHRONICLE (New York, 1865-).
- COXE, TENCH. *Statement of the Arts and Manufactures of the United States* (1813).

- DAVIES, BENJAMIN. *A New System of Modern Geography* (1805).
 DAVIS, JOHN. *Travels of Four Years and a Half in the United States, 1798, 1802* (1802).
 DE TOCQUEVILLE, ALEXIS CHARLES. *De la démocratie en Amérique* (1836).
 DICKENS, CHARLES. *American Notes* (1842).
 DRAKE, CHARLES D. *Pioneer Life in Kentucky* (1870).
 DWIGHT, TIMOTHY. *Travels in New England and New York, 1796-1815* (4 vols., 1821-1822).
- FAUX, WILLIAM. *Memorable Days in America* (1823).
 FERGUSON, WILLIAM. *America by River and Rail* (1856).
 FISHER, RICHARD S. *The Progress of the United States of America from the Earliest Periods* (1854).
 FLAGG, A. C. *Internal Improvements in New York* (in *Hunt's Merchants' Magazine*, XXIII-XXV, 1850-1851).
 FLINT, HENRY M. *Railroads of the United States, their History and Statistics* (1868).
 FLINT, TIMOTHY. *A Condensed Geography and History of the Western States* (1828).
 ———. *History and Geography of the Mississippi Valley* (2 vols., 2d ed., 1832).
 ———. *Recollections of the Last Ten Years, 1815-25* (1826).
- GALLATIN, ALBERT. *Report on Internal Improvements* (American State Papers, Miscellaneous, 1, 724).
 GOUGE, WILLIAM M. *A Short History of Paper Money and Banking in the United States* (1833).
 GREERLEY, HORACE. *An Overland Journey from New York to San Francisco in the Summer of 1859* (1860).
 GREENHOW, R. *History of Oregon and California* (1844).
 GREGG, JOSIAH. *Commerce of the Prairies: The Journal of a Santa Fe Trader* (2 vols., 1845; also in Thwaites *Early Western Travels*, XIX, 155).
- HALL, J. *Letters from the West* (1828).
 ———. *Notes on Western States* (1838).
 ———. *Ohio Navigation* (1821).
 ———. *Statistics of the West* (1836).
 HARMON, DANIEL WILLIAMS. *A Journal of Voyages and Travels in the Interior of North America, 1800* (1904).
 HAZARD, SAMUEL. *Hazard's Register of Pennsylvania* (16 vols., 1828-1835).
 HEWETT, D. *The American Traveller* (1825).
 HILL, H. W. *Historical Review of Waterways and Canal Construction in New York State* (Buffalo Historical Society Publications, 1908).
 HOMANS, BENJAMIN. *The United States Railroad Directory for 1856* (1856).
 HULBERT, A. B. *Historic Highway Series* (15 vols., 1902-1905): vol. II, *Indian Thoroughfares*; vol. III, *Washington's Road; The First Chapter of the Old French War*; vol. VI, *Boone's Wilderness Road*; vol. VII, *Portage Paths; The Keys of the Continent*; vol. IX, *Waterways of Westward Expansion*; vol. X, *The Cumberland Road*; vols. XI, XII, *Pioneer Roads of America* (2 vols.); vols. XIII, XIV, *The Great American Canals* (2 vols.).
- IMLAY, GILBERT. *A Topographical Description of the Western Territory of North America* (1792).
 INGLE, EDWARD. *Southern Side-Lights* (1896).
 INMAN, HENRY. *The Great Salt Lake Trail* (1898).
 ———. *The Old Santa Fe Trail* (1898).
- JONES, ALEXANDER. *Historical Sketch of the Electric Telegraph* (1852).
 JONES, CHESTER LLOYD. *The Economic History of the Anthracite Tidewater Canals* (Publications of the University of Pennsylvania, 1908).
 JOURNAL OF COMMERCE AND COMMERCIAL BULLETIN (New York, 1827-).
- KETTLELL, T. P. *Southern Wealth and Northern Profits in Eighty Years' Progress* (1860).
- LAMBERT, JOHN. *Travels through Lower Canada and the United States* (2 vols., 1814).
 LARDNER, DIONYSIUS. *Railway Economy* (1850).
 LAUT, AGNES C. *Pathfinders of the West* (1904).
 LORD, DANIEL. *The Effect of Secession on the Commercial Relations Between the North and South* (Secession Pamphlets, VIII, 1861).

- LYELL, SIR CHARLES. *Second Visit to the United States of North America, 1845-46* (2 vols., 1849).
 ———. *Travels in North America, 1841-42* (1845).
- MACKAY, ALEXANDER. *The Western World* (1849).
- MARTINEAU, HARRIET. *Society in America* (3 vols., 1837).
- MICHAUX, F. A. *Travels to the Westward of the Alleghany Mountains* (1805).
- MILLS, R. *Statistics of South Carolina* (1826).
- MITCHELL, SAMUEL A. *Mitchell's Compendium of all the Internal Improvements of the United States* (1835).
- MORRIS, C. N. *Internal Improvements in Ohio, 1825-50* (Papers American Historical Association, III, 1889, 349-380).
- MORSE, JEDIDIAH. *The American Gazetteer* (1797).
- MOULTON, H. G. *Waterways versus Railways* (1912).
- MURRAY, HUGH. *The United States of America* (1844).
- OGG, FREDERIC AUSTIN. *Opening of the Mississippi: A Struggle for Supremacy in the American Interior* (1904).
- OLMSTED, F. L. *The Cotton Kingdom* (2 vols., 1861).
 ———. *A Journey in the Back Country* (1860).
 ———. *Journey through Texas* (1860).
 ———. *Seaboard Slave States* (1856).
- PATTON, J. H. *Natural Resources of the United States* (1888).
- PETO, SIR S. MORTON. *Resources and Prospects of America* (1866).
- PHILLIPPS, U. B. *History of Transportation in the Eastern Cotton Belt to 1860* (1908).
- POOR, H. V. *Manual of Railroads* (annual, 1868-).
 ———. *Sketch of the Rise and Progress of Internal Improvements* (in *Manual of Railroads for 1881*).
- POSTEL, KARL. *Life in the New World* (translated by Hebbe and Mackay, 1844).
- POUSSIN, G. T. *The United States: Its Power and Progress* (1851).
- REPORT OF THE COMMITTEE OF THE NEW YORK CONVENTION OF THE FRIENDS OF DOMESTIC INDUSTRY (OCTOBER 26, 1831) ON COASTING TRADE AND INTERNAL COMMERCE.
- RICHARDS, THOMAS ADDISON. *Appleton's Illustrated Hand-Book of American Travel* (1857).
- RINGWALT, J. L. *Development of Transportation Systems in the United States* (1888).
- ROOSEVELT, THEODORE. *Winning of the West* (4 vols., 1889-1896).
- SANBORN, J. B. *Congressional Grants of Land in Aid of Railways* (Bulletin of the University of Wisconsin, No. 30, 1899).
- SCHOOLCRAFT, HENRY R. *Narrative Journal of Travels through the Northwestern Regions of the United States* (1821).
 ———. *Travels in the Central Portion of the Mississippi Valley* (1825).
- SEAMAN, EZRA CHAMPION. *Progress of Nations* (essays, 1846).
- SMALLEY, E. V. *History of the Northern Pacific Railroad* (1883).
- SMITH, JOHN CALVIN. *The Illustrated Hand-Book* (1846).
- STIRLING, JAMES. *Letters from the Slave States* (1856).
- STORROW, SAMUEL A. *Narrative of a Tour in the Summer of 1817 on Shores of Lake Superior and Other Northern Lakes of the United States* (1818).
- STUART, JAMES. *Three Years in North America* (2 vols., 1833).
- TANNER, H. S. *A Description of the Canals and Railroads in the United States* (1840).
 ———. *Recent Surveys and Internal Improvements in the United States* (1830).
 ———. *View of the Valley of the Mississippi* (1834).
- THOMAS, DAVID. *Travels Through the Western Country in the Summer of 1816* (1819).
- THOMPSON, J. G. *Rise and Decline of the Wheat-Growing Industry in Wisconsin* (1908).
- THWAITES, R. G. (ed.). *Early Western Travels, 1748-1846* (32 vols., 1904-1907).
- TROLLOPE, ANTHONY. *North America* (1862).
- TUNELL, GEORGE G. *Report on Lake Commerce* (Department of Commerce and Labor, Bureau of Statistics, 1895).

376 *History of Domestic and Foreign Commerce.*

TURNER, F. J. *The Significance of the Frontier in American History* (1894).
 TWINING, THOMAS. *Travels in America One Hundred Years Ago, 1795-96* (1894).

UNITED STATES:

Department of the Interior—
Statement Showing Land Grants made by Congress to aid in the construction of Railroads, Wagon Roads, Canals and Internal Improvements (1888).
 Department of the Treasury—
 Bureau of Statistics—
"Internal Commerce" in Monthly Summary of Commerce and Finance, March 1901.
 Department of War—
Report of the Chief of Engineers (annual, 1823-1861, 1864-).
 Interstate Commerce Commission—
Reports (annual, 1887-).
Statistics of Railways (annual, 1888-).

VAN HISE, C. R. *The Conservation of Natural Resources in the United States* (1910).
 VERHOEFF, MARY. *The Kentucky Mountains Transportation and Commerce, 1750-1911* (1911).
 WARD, G. W. *The Early Development of the Chesapeake and Ohio Canal Project* (Johns Hopkins University Studies, xvii, 1899).
 WEAVER, C. C. *History of Internal Improvements in North Carolina Previous to 1860* (Johns Hopkins University Studies, xxi, 1903).
 WELBY, ADLARD. *A Visit to North America and the English Settlements in Illinois* (1821).
 WELD, CHARLES R. *A Vacation Tour in the United States and Canada* (1855).
 WELD, ISAAC, JR. *Travels Through the States of North America . . . 1795, 1796 and 1797* (1799).
 WHITE, H. K. *History of the Union Pacific Railroad* (1895).
 WHITNEY, ASA. *Project for a Railroad to the Pacific* (1849).
 WINSOR, JUSTIN. *The Westward Movement, 1763-1798* (1897).
 WINTERBOTHAM, WILLIAM. *An Historical, Geographical, Commercial, and Philosophical View of the American United States* (1795).
 WOODS, JOHN. *Two Years' Residence in the Settlement on the English Prairie in the Illinois Country* (1822).

THE FOREIGN TRADE, 1789-1914.

ADAMS, BROOKS. *Meaning of the Recent Expansion of the Foreign Trade of the United States* (1902).
 AMERICAN STATE PAPERS. *Commerce and Navigation*, vol. II (1834).
 ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE: *Tariffs, Reciprocity and Foreign Trade* (May 1907). *Latin America* (June 1911). *China* (Jan. 1912). *Canadian National Problems* (Jan. 1913).
 ASHLEY, W. J. *British Industries* (1903).
 BAINE, EDWARD. *History of the Cotton Manufacture in Great Britain* (1835).
 BAKER, JOHN MARTIN. *A View of the Commerce between the United States and Rio de Janeiro* (1838).
 ———. *A View of the Commerce of the United States and the Mediterranean Seaports, Including the Adriatic and Morea* (1847).
 BANCROFT, H. H. *The New Pacific* (rev. ed., 1912).
 BARKER, J. E. *Modern Germany, Her Political and Economic Problems* (2d ed., 1907).
 BASTABLE, C. F. *The Theory of International Trade* (4th ed., 1903).
 BATES, WILLIAM B. *The American Marine* (2d ed., 1897).
 ———. *American Navigation* (1902).
 BOARD OF TRADE (GREAT BRITAIN). *American Competition in Iron and Steel Trade* (Board of Trade Journal, xli, 163, 1903).
 ———. *The Board of Trade Journal* (weekly, 1881-).
 BOLCE, HAROLD. *The New Internationalism* (1907).
 BRISSOT, J. P. *The Commerce of America with Europe, Particularly with France and Great Britain* (1795).
 BROWNE, G. WALDO (ed.). *The New Far East and the New America* (6 vols., 1901).

- BUCHANAN, ISAAC. *The Relation of the Industry of Canada with the Mother Country and the United States* (1864).
- BUREAU OF AMERICAN REPUBLICS (changed to International Bureau of American Republics and later to the Pan American Union), *Bulletins* (1891-1908); *Monthly Bulletin* (1894).
- BURNLEY, JAMES. *The Story of British Trade and Industry* (1904).
- CANADA, Department of Agriculture. *The Statistical Year Book of Canada* (annual, 1885-).
- CHAPMAN, JOHN. *The Cotton and Commerce of India* (1851).
- CHAPMAN, J. H. *The Woolen and Worsted Industries* (1907).
- CHAPMAN, SYDNEY J. *The History of Trade Between the United Kingdom and the United States* (1899).
- . *The Lancashire Cotton Industry* (1904).
- CHARLES, GARFIELD (compiler). *Treaties, Conventions, etc., between the United States of America and other Powers, 1910-1913* (Sen. Doc. No. 1063, 62 Cong., 3 sess., 1913. A supplement (vol. III) to Malloy, *Treaties, Conventions, etc.*, Sen. Doc. No. 357, 61 Cong., 2 sess., 2 vols., 1910).
- CHATTERTON, E. KEBLE. *Steamships and Their Story* (1910).
- CLARK, A. H. *The Clipper Ship Era, 1843-1869* (1911).
- CLARK, W. J. *Commercial Cuba* (1898).
- COMMITTEE OF LORDS OF PRIVY COUNCIL. *The Trade of Great Britain with the United States* (Jan. 1791; reprinted by U. S. Department of State, 1888).
- CONANT, C. A. *The United States in the Orient* (1900).
- COOLIDGE, A. C. *The United States as a World Power* (1908).
- CORTELYOU, G. B. "Some Agencies for Extension of our Domestic and Foreign Trade," in *Annals of the American Academy of Political and Social Science*, xxiv, July 1904.
- CORWIN, THOMAS. *Report on the Trade and Commerce of the British North American Colonies with the United States and other Countries, 1829-1850* (Sen. Exec. Doc. No. 23, 31 Cong., 2 sess., 1851).
- CRAIK, G. L. *The History of British Commerce—From the Earliest Time* (3 vols., 1844).
- CRITCHELL and RAYMOND. *A History of the Frozen Meat Trade* (1912).
- CROIL, JAMES. *Steam Navigation and its Relation to the Commerce of Canada* (1898).
- CROOKES, SIR WILLIAM. *The Wheat Problem; with Chapters on Future Wheat Supply of the United States*, by C. W. Davis and John Hyde (1899).
- CUNNINGHAM, W. *The Growth of English Industry and Commerce in Modern Times* (4th ed., 2 vols., 1905-1907).
- CURTIS, W. E. *Trade and Transportation Between the United States and Spanish America* (1889).
- DEBOW, J. D. B. *The Progress of American Commerce* (*DeBow's Commercial Review*, II, 1846).
- DEHN, R. M. R. *The German Cotton Industry* (1913).
- DUES AND PORT CHARGES ON SHIPPING THROUGHOUT THE WORLD (3 vols., 1914).
- DUMONT, H. D. *Report on Cuba to the Merchants' Association of New York* (2d ed., 1903).
- DUNMORE, W. T. *Ship Subsidies* (1907).
- ELLISON, THOMAS. *The Cotton Trade of Great Britain* (1886).
- EDGE, F. M. *The Destruction of the American Carrying Trade* (1863; 2d ed., 1864).
- EMORY, FREDERIC. "Causes of our Failure to Develop South American Trade," in *Annals of American Academy of Political and Social Science*, xxii, July 1903.
- EVANS, CHARLES H. (compiler). *Exports, Domestic, from the United States to all Countries, 1789-1883 Inclusive* (1884).
- . *Imports—Duties, from 1867-1883* (1884).
- EXPORTERS AND IMPORTERS JOURNAL (monthly, 1892-).
- FEARSON, HENRY B. *Sketch of America* (London, 1818).
- FISK, G. M. *International Commercial Policies* (1910).
- FLETCHER, R. A. *Steamships. The Story of their Development to the Present Day* (1910).
- FOSTER, J. W. *American Diplomacy in the Orient* (1903).
- FREEMAN and CHANDLER. *The World's Commercial Products* (1908).
- GEERLIGS, H. C. P. *The World's Cane Sugar Industry—Past and Present* (1912).
- GIBBINS, H. DE B. *British Commerce and Colonies* (3d ed., 1899).

- GIBBINS, H. DE B. *Economic and Industrial Progress of the Century* (1903).
 GREAT BRITAIN. *Statistical Abstract for the United Kingdom* (annual, 1852-).
 GRIFFIN, A. P. C. *A List of Books, etc., on Mercantile Marine and Subsidies* (Library of Congress, 1903, 1906).
 ——. *List of Books, etc., on Reciprocity with Canada* (Library of Congress, 1907).
 ——. *List of Works on the Tariffs of Foreign Countries* (Library of Congress, 1906).
 GRIFFIN and MEYER. *List of References on Reciprocity* (Library of Congress, 1910).
 GRIFFIS, W. E. *America in the Far East* (1900).
 HALE, A. *The South Americans—The Story of the South American Republics, etc.* (1907).
 HERTSLET'S COMMERCIAL TREATIES OF GREAT BRITAIN (periodically, 1820-1913).
 HILL, CHARLES S. *History of American Shipping, its Prestige, Decline and Prospect* (1883).
 HOBSON, JOHN A. *International Trade* (1904).
 HOLMES, ISAAC. *An Account of the United States of America* (about 1823).
 HOMANS, J. SMITH, JR. *An Historical and Statistical Account of the Foreign Commerce of the United States, 1820-1856* (1857).
 HOPKINS, J. C. *Progress of Canada in the Century* (1902).
 HOUGH, B. O. *Elementary Lessons in Exporting* (1909).
 HUEBNER, G. G. "Tariff Provisions for Promotion of Foreign Trade of the United States," in *Annals of American Academy of Political and Social Science*, XXIX, May 1907.
 INTERNATIONAL BUREAU OF AMERICAN REPUBLICS:
 Argentina (1903).
 Bolivia (1904).
 The United States of Brazil (1901).
 INTERNATIONAL RUBBER CONGRESS (edited by Torrey and Manders), *The Rubber Industry* (1911).
 JEANS, J. S. *The Iron Trade of Great Britain* (1906).
 — (ed.). *Reports on American Industrial Conditions and Competition, by the Commissioners appointed by the British Iron Trade Association* (1902).
 JOHNSON, EMORY R. *Ocean and Inland Water Transportation* (1906).
 ——. *Panama Canal Traffic and Tolls* (1912).
 KEILER, HANS. *American Shipping, Its History and Economic Conditions* (1913).
 KERBEY, J. O. *An American Consul in Amazonia* (1911).
 KITCHELL, J. G. *American Supremacy: Being a Compilation of Facts and Statistics Regarding Foreign Commerce* (1901).
 LAUGHLIN and WILLIS. *Reciprocity* (1903).
 LAUT, AGNES C. *The Conquest of the Great Northwest—The Hudson Bay Company* (2 vols., 1908).
 LINDSAY, W. S. *History of Merchant Shipping and Ancient Commerce* (4 vols., 1876).
 LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING (annual, 1834-).
 MACGREGOR, JOHN. *The Commercial and Financial Legislation of Europe and America* (1841).
 MCKENZIE, F. A. *The American Invaders, etc.* (1901).
 MAHAN, A. T. *From Sail to Steam* (1907).
 MALLOY, WM. M. (compiler). *Treaties, Conventions, etc., between the United States of America and other Powers, 1776-1909* (Sen. Doc. No. 357, 61 Cong., 2 sess., 2 vols., 1910).
 MEEKER, ROYAL. *History of Shipping Subsidies* (American Economic Association Publications, 3d Series, vi, No. 3, 1905).
 A MERCHANT OF PHILADELPHIA. *Spanish America and the United States, or News of the Actual Commerce of the United States with the Spanish Colonies* (1818).
 MEYER, H. B. *Additional References Relating to Mercantile Marine Subsidies* (Library of Congress, 1911).
 ——. *Additional References Relating to Reciprocity with Canada* (Library of Congress, 1911).
 MORSE, H. B. *The International Relations of the Chinese Empire, 1834-1860* (1910).
 NELSON, ERNESTO. "Argentine Commerce with the United States and Europe," in *Annals of American Academy of Political and Social Science*, XXII, July 1903.
 NORTH, S. N. D. "The Tariff and the Export Trade of the United States," in *Annals of American Academy of Political and Social Science*, XXIII, Jan. 1904.

- ODDY, J. J. *European Commerce* (2 vols., 1805).
- OGG, FREDERICK A. "Railroad Rates and the Flow of Our Foreign Trade," in *Review of Reviews*, April 1906.
- OSBORNE, J. B. "Reciprocity in the American Tariff System," in *Annals of American Academy of Political and Social Science*, XXIII, Jan. 1904.
- PAISH, GEORGE. *The Trade Balance of the United States* (Publications of National Monetary Commission, Sen. Doc. No. 579, 61 Cong., 2 sess., 1910).
- PHILADELPHIA COMMERCIAL MUSEUM. *Foreign Commercial Guide—South America* (1906).
- . *World's Commerce and American Industries* (1903).
- . *Commerce of the World in 1910* (1911).
- . *World's Commerce and the United States' Share of It* (1899).
- PHILIP, GEORGE. *Philip's Chamber of Commerce Atlas* (1912).
- PHILIP, GEORGE, and SON. *The Merchant Shippers' and Ocean Travellers' Atlas* (1902).
- PIGEON, A. C. *Protective and Preferential Import Duties* (1906).
- RABBENO, U. *The American Commercial Policy* (1895).
- RITTER, ABRAHAM. *Philadelphia and Her Merchants as Constituted Fifty to Seventy Years Ago* (1860).
- ROMERO, MATIAS. *Mexico and the United States* (1898).
- ROOT, J. W. *The Trade Relations of the British Empire* (1903).
- RUTTER, F. R. *The South American Trade of Baltimore* (Johns Hopkins University Studies, xv, No. 9, Sept. 1897).
- RUTTER, W. P. *Wheat Growing in Canada, the United States and the Argentine* (1911).
- SANFORD, NATHAN. *A Report on Commerce, 1789 to 1819, made to the Senate, December 20, 1819* (*Niles' Register*, xix, 1820).
- SMITH, J. RUSSELL. *The Organization of Ocean Commerce* (Publications, University of Pennsylvania, 1905).
- . "Western South America and its Relations to American Trade," in *Annals of American Academy of Political and Social Science*, xviii, Nov. 1901.
- SOCIETY OF SHIPOWNERS OF GREAT BRITAIN. *Collection of Interesting and Important Reports and Papers on the Navigation and Trade of Great Britain, etc.* (1807).
- SOLEY, J. R. *The Maritime Industries of America* (in Shaler's *The United States of America*, ed. of 1897).
- THE STATIST (weekly, 1878-).
- STERNS, W. P. "The Foreign Trade of the United States, 1820-1840" (in *Journal of Political Economy*, viii, Dec. 1899).
- STEVENS, F. S. Speech in House of Representatives on Panama Canal Tolls (*Congressional Record*, 63 Cong., 2 sess., 6664-6689, April 6, 1914).
- TAYLOR, R. C. *Statistics of Coal—Production, Consumption and Commercial Distribution in all Parts of the World* (revised by S. S. Halderman in 1845, 1848).
- THE TEA AND COFFEE TRADE JOURNAL (monthly, 1901-).
- THURBER, F. B. *Coffee—From Plantation to Cup* (1883).
- TOMPKINS, D. A. *American Commerce, Its Expansion* (a collection of addresses and pamphlets relating to the extension of foreign markets for American manufactures, 1900).
- UNITED STATES:
- Department of Agriculture—
- Section of Foreign Markets (established 1894; became Division of Foreign Markets, July 1, 1902; placed under Bureau of Statistics, Department of Agriculture, July 1, 1903)—
- Annual Reports* (1897-1903).
- Bulletins*.
- Department of Commerce—
- Bureau of Foreign and Domestic Commerce (in Department of Commerce and Labor, 1912-1913)—

UNITED STATES—Continued.

Department of Commerce—Continued.

Daily Consular and Trade Reports (daily except Sundays and holidays, Jan. 1, 1898, to Feb. 28, 1910; July 5, 1910— . Published as *Advance Sheets of Consular Reports*, Jan. 1, 1898, to Aug. 19, 1903; as *Daily Consular Reports*, Aug. 20, 1903, to July 17, 1905. Issued by Bureau of Foreign Commerce, Department of State, Jan. 1, 1898, to June 30, 1903; by Bureau of Statistics, Department of Commerce and Labor, July 1, 1903, to June 30, 1905; by Bureau of Manufactures, July 1, 1905, to 1912).

Monthly Summary of Commerce and Finance. For history, *see* United States, Department of Commerce, 369. Titles as indicated in the following issues:

American Commerce, 1821-1898 (June, 1899).

British West Indies and Other Possessions in America South of the United States (May 1899).

Commerce of Asia and Oceania, 1821-1898 (Nov. 1898).

Commerce of Mexico, Central and South America, and the West Indies, with Share of the United States and other Leading Nations therein, 1821-1900 (Aug. 1901).

Commerce of Spain in 1898 (Apr. 1899).

Commercial Africa in 1899 (Aug. 1899).

Commercial Africa in 1901 (Apr. 1902).

Commercial Australia in 1900 (Nov. 1901).

Commercial China in 1899 (Dec. 1899).

Commercial China in 1900 (June 1901).

Commercial China in 1904 (Jan. 1904).

Commercial Cuba in 1905 (May 1905).

Commercial India in 1902 (Dec. 1902).

Commercial Japan in 1899 (July 1899).

Commercial Japan in 1900 (Dec. 1901).

The Danish West Indies (Jan. 1902).

Diplomatic and Consular Service of the United States (Sept. 1903).

Exports of Domestic Manufactures and Imports of Manufacturers' Materials (May 1903).

Exports of Manufactures, 1880-1898 (May 1899).

Exports of Manufactures from the United States and their Distribution by Articles and Countries, 1700-1902 (April 1903).

Great Canals of the World (Dec. 1901).

Merchandise Declared for Export to the United States from each Consular District in Foreign Countries (Dec. 1903).

Reciprocity Treaties and Agreements (Sept. 1901).

The Russian Empire (April 1899).

The World's Production and Consumption of Coffee, Tea, Cocoa, and Yerba Mate (July 1905).

Department of Commerce and Labor (divided by act of March 4, 1913, into Department of Commerce and Department of Labor)—

Bureau of Manufactures (organized 1905, combined with Bureau of Statistics 1912, to form Bureau of Foreign and Domestic Commerce)—

Commercial Relations (annual, 1855-1911. By Bureau of Foreign Commerce, Department of State, 1855-1902; by Bureau of Statistics, Department of Commerce and Labor, 1903).

Monthly Consular and Trade Reports (monthly, 1880-1910. Issued by Bureau of Foreign Commerce, Department of State, 1880-1903; by Bureau of Statistics, Department of Commerce and Labor, 1903-1905. Discontinued since June 1910).

Report by Lincoln Hutchinson on Trade Conditions in Argentina, Paraguay and Uruguay (1906).

Report on Trade Conditions in Colombia (1907).

UNITED STATES—Continued.

Department of Commerce and Labor, etc.—Continued.

Bureau of Statistics (formed July 1903, by consolidation of Bureau of Foreign Commerce of Department of State and Bureau of Statistics of Department of the Treasury; consolidated, 1912, with Bureau of Manufactures to form Bureau of Foreign and Domestic Commerce)—

Analysis of the Foreign Trade of the United States, 1895-1905 (1906).

Commercial America in 1907 (1908).

The Commercial Orient in 1905 (1906).

Exports of Manufactures from the United States and their Distribution by Articles and Countries, 1800-1906 (1907).

Department of the Interior—

Census Office (now Bureau of the Census in Department of Commerce)—*History and Present Condition of New Orleans* (1881).

Department of the Navy—

Naval Intelligence Office. *Ports of the World: Their Coaling, Docking and Repairing Facilities* (1909).

Department of State—

Secretary—

Digest of Existing Commercial Regulations with Foreign Countries (3 vols., 1835-36).

Commercial Regulations of Foreign Countries with which the United States have Commercial Intercourse (1819).

Bureau of Foreign Commerce (Statistical Office, 1854-1874; Bureau of Statistics, 1874-1897)—*Report on Commercial Relations of United States with all Foreign Nations* (4 vols., 1855).

VANDERLIP, FRANK A. *The "American Commercial Invasion" of Europe* (1902).

VIGNES, EMMANUEL. *Repertoire General du Commerce National et International—Etats-Unis-France* (1902).

WARBURG, PAUL M. *The Discount System in Europe* (Publications National Monetary Commission, 1910).

WATSON, N. L. *The Argentine as a Market* (1908).

WELLS, DAVID A. *Our Merchant Marine* (1887).

WHELPLEY, JAMES D. *The Trade of the World* (1913).

WILLIAMS, M. *Position of the Cotton Trade, 1861-1863* (1863).

WILLIS, H. P. Reciprocity with Cuba, in *Annals of American Academy of Political and Social Science*, XXII, July 1903.

WILLMAN, R. *China as Open Door* (1900).

WILLSON, BECKLES. *The Great Company—A History of the Honourable Company of Merchant Adventurers Trading Into Hudson's Bay* (2 vols., 1900).

YEATS, JOHN. *Manual of Commerce* (4 vols.); vol. III, *Growth and Vicissitudes of Commerce in All Ages*, etc. (1887).

TRADE WITH NON-CONTIGUOUS POSSESSIONS.

ALASKA, GOVERNOR OF. *Annual Report* (1884-).

ALASKA RAILROAD COMMISSION. *Railway Routes in Alaska* (1913).

ALEXANDER, W. D. *Relation Between the Hawaiian Islands and Spanish America in Early Times* (Papers of the Hawaiian Historical Society, No. 1, 1892).

ATKINSON, F. W. *The Philippine Islands* (1905).

AUSTIN, O. P. "Our Trade with Hawaii and Porto Rico," in *Annals of American Academy of Political and Social Science*, XIX, May 1902.

———. "Problems of the Pacific" (*Monthly Summary of Commerce and Finance*, Aug. 1902).

BANCROFT, H. H. *History of Alaska* (vol. XXVIII, *History of Pacific States*, 1886).

BEALL, M. E., P. LACOSTE, CHAS. H. ALLEN, etc. *Opportunities in the Colonies and Cuba* (1902).

BLACKMAN, W. F. *The Making of Hawaii* (1899).

BLAIR and ROBERTSON. *The Philippine Islands, 1493-1898* (55 vols., 1903-1909).

BROWNE, G. WALDO. *The Pearl of the Orient—The Philippine Islands* (1900).

- CARPENTER, E. J. *America in Hawaii—A History of United States' Influence in the Hawaiian Islands* (1899).
- CARROLL, H. C. *The Island of Porto Rico, Its Population, Commerce, Industries, etc.* (U. S. Treasury Department, 1899).
- COLQUHOUN, A. R. *The Mastery of the Pacific* (1902).
- DAVIS, G. W. *Reports on the Industrial and Economic Conditions of Puerto Rico* (1900).
- DE MORGÁ, ANTONIO. *History of Philippine Islands, from the Discovery by Magellan in 1521 to Beginning of the 17th Century* (translated by Blair and Robertson, 2 vols., 1907).
- DINWIDDIE, WILLIAM. *Puerto Rico, Its Conditions and Possibilities* (1899).
- FORBES-LINDSAY, C. H. *American Insular Possessions* (2 vols., 1906).
- FOREMAN, J. *The Philippine Islands* (3d ed., 1906).
- GRIFFIN, A. P. C. *List of Books, etc., on Porto Rico* (Library of Congress, 1901).
- . *List of Books, etc., on the Philippine Islands* (Library of Congress, 1903).
- . *List of Books, etc., on Samoa and Guam* (Library of Congress, 1901).
- HARRIMAN ALASKA EXPEDITION. *Alaska* (2 vols., 1901).
- IRELAND, ALLEYNE. *The Far Eastern Tropics* (1905).
- JARVIS, J. J. *History of the Hawaiian Islands* (1872).
- McKINLEY, A. E. *Island Possessions of the United States* (1907).
- PHILADELPHIA COMMERCIAL MUSEUM. *The Philippine Islands* (1902).
- PHILIPPINE COMMISSION. *Annual Report* (1899-).
- PLEHN, CARL C. "Tariff Relations of the United States and the Philippine Islands," in *Annals of the American Academy of Political and Social Science*, xxiii, Jan. 1904.
- PORTO RICO, GOVERNOR OF. *Annual Report* (1900-).
- ROBERTSON, J. A. *Bibliography of the Philippine Islands* (1908).
- SAWYER, F. H. *The Inhabitants of the Philippines* (1900).
- SCHAFER, JOSEPH. *The Pacific Slope and Alaska* (1904).
- TAFT, WILLIAM H. *Special Report to the President on the Philippines* (1908).
- THRUM, THOMAS G. *Hawaiian Almanac and Annual* (1884).
- UNITED STATES:
- Department of Agriculture—
- Division of Foreign Markets—
- Trade of the Philippine Islands* (Bulletin No. 14, 1898).
- The Trade of Porto Rico* (Bulletin No. 13, 1898).
- Department of Commerce—
- Bureau of Foreign and Domestic Commerce—
- Monthly Summary of Commerce and Finance* (for history, see United States, Department of Commerce, p. 368). The following issues, under titles indicated:
- Foreign Commerce of Cuba, Porto Rico, Hawaii, the Philippines and Samoan Islands* (Feb. 1899).
- Cuba, Porto Rico, Hawaiian, Philippine and Samoan Islands, Their Commerce with the United States and other Countries, etc.* (Nov. 1899).
- Porto Rico, Hawaii, the Philippine Islands, Guam and Samoan Islands and Cuba* (July 1901).
- Commercial Alaska* (July 1903).
- Census Office (under Secretary of State, 1800-1849; in Department of the Interior, 1849-1903; transferred to Department of Commerce and Labor under name of Bureau of the Census, 1903; in Department of Commerce since 1913).
- Population and Resources of Alaska, 1890* (1893).
- Census of the Philippine Islands, 1903* (4 vols., 1905).

UNITED STATES—Continued.

Department of Commerce and Labor (divided by act of March 4, 1913, into Department of Commerce and Department of Labor)—

Bureau of Statistics—

Commercial Philippines in 1906 (1907).

Commercial Porto Rico in 1906 (1907).

Department of War—

Bureau of Insular Affairs (Division of Customs and Insular Affairs, 1898–1900; Division of Insular Affairs, Dec. 10, 1900, to July 1, 1902).

Annual Report to Secretary of War (1903–1913).

Foreign Commerce of the Philippine Islands, 1909–1911 (1912).

Monthly Summary of Commerce of the Philippine Islands (monthly, 1900–1905; changed to quarterly, 1906–1910).

Monthly Summary of Commerce of Porto Rico (monthly, 1900–1902).

Official Handbook: Description of the Philippines (1903).

VAN MIDDLEDYK, R. A. *The History of Puerto Rico* (1903).

VIVIAN and SMITH. *Everything about our new Possessions* (1899).

WHITNEY, CASPAR. *Hawaiian America, Its History, Resources and Prospects* (1899).

WORCESTER, D. C. *The Philippine Islands and Their People* (1899).

———. *Philippines, Past and Present* (2 vols., 1914).

FISHERIES.

ATWATER, W. C. *American Fisheries, Menhaden* (1880).

BAIRD, SPENCER F. *Sea Fisheries of Eastern North America* (Report of U. S. Fish Commission, 1886).

BABSON, JOHN J. *History of Gloucester* (1860).

BOSTON FISH BUREAU. *Annual Report* (1875–).

CALCULATION OF THE STATE OF THE COD AND WHALE FISHERY BELONGING IN MASSACHUSETTS IN 1763 (Massachusetts Historical Society Collections, VIII, 202–203, 1764).

COLLINS, J. W. *Statistical Review of the Coast Fisheries of the United States* (Report, U. S. Fish Commission, 1888).

COLLINS and SMITH. *Report on the Fisheries of the New England States* (Bulletin of U. S. Fish Commission, XIX, 241, 1899).

DAVIDSON, HUNTER. *Report on the Oyster Resources of Maryland* (1870).

ELLIOTT, CHARLES B. *The United States and the Northeastern Fisheries* (1887).

ELLIOTT, H. W. *A Monograph of the Seal Islands of Alaska* (1882).

THE FISHING GAZETTE (1885–).

GOODE, GEORGE BROWN. *A Review of the Fishing Industry of the United States and the Work of the United States Fish Commission* (1884).

GOODE, GEORGE BROWN, and others. *The Fisheries and Fishery Industries of the United States* (7 vols. in 5 sections, 1884–1887; section I, *Natural History of Useful Aquatic Animals*; section II, *A Geographical Review of the Fisheries Industries and Fishing Communities for the Year 1880*; section III, *The Fishing Grounds of North America, with forty-nine charts*; section IV, *The Fishermen of the United States*; section V, *History and Methods of the Fisheries*).

JORDAN, D. S., and others. *Fur Seal and Fur-Seal Islands of the North Pacific Ocean* (5 parts, 1898–1899).

KELLOG, J. L. *Clam and Scallop Industries of New York State* (Bulletin of the New York State Museum, 1901).

MCDONALD, M. *Salmon Fisheries of the Columbia River* (1894).

McFARLAND, RAYMOND. *A History of the New England Fisheries* (Publications, University of Pennsylvania, 1911).

OYSTER TRADE OF THE CHESAPEAKE (*DeBow's Commercial Review*, 1858).

SABINE, LORENZO. *Report on the Principal Fisheries of the American Seas* (1853; also in Exec. Doc. No. 23, 32 Cong., 2 sess., and in House Misc. Doc. No. 32, 42 Cong., 2 sess.).

SCAMMON, C. M. *The Marine Mammals of the Northwest Coast of North America, with an Account of the American Whale Fishery* (1874).

SNOW, F. *Treaties and Topics in American Diplomacy* (1894).

STARBUCK, ALEXANDER. *History of the American Whale Fishery from its Earliest Inception to the Year 1876* (1878).

TINGLE, G. R. *Report on the Salmon Fisheries of Alaska* (1897).

TOWER, W. S. *A History of the American Whale Fishery* (Publications, University of Pennsylvania, 1907).

UNITED STATES:

Department of Commerce—

Bureau of the Census. *Fisheries of the United States, 1908* (1911).

Bureau of Fisheries (in Department of Commerce and Labor, 1903-1913; previous to 1903, the U. S. Fish Commission, an independent government office, established by joint resolution of Congress, Feb. 9, 1871)—

Bulletins (annual, 1881-).

Reports (annual, 1871-).

Department of State—

Proceedings of Tribunal of Arbitration . . . for Determination of Rights of United States in the Bering Sea (Sen. Exec. Doc. No. 177, 53 Cong., 2 sess., 16 vols., 1895).

Proceedings in the North Atlantic Coast Fisheries Arbitration before the Permanent Court of Arbitration at The Hague (Sen. Doc. No. 870, 61 Cong., 3 sess., 12 vols., 1912).

WHALEMEN'S SHIPPING LIST AND MERCHANTS TRANSCRIPT (a trade journal, 1843-).

GOVERNMENT AID AND COMMERCIAL POLICY.

AMERICAN STATE PAPERS (vol. xiv, *Naval Affairs*).

ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE. *American Waterways*. (Various articles and addresses on waterways by J. A. Fairlie, C. I. Jones, F. G. Newlands, Gifford Pinchot, J. E. Ransdell, Theodore Roosevelt, George C. Sikes, *et al.*, xxxi, No. 1, Jan. 1908).

BATES, WILLIAM W. *American Navigation: The Political History of its Rise and Ruin and the Proper Means for its Encouragement* (1902).

BENNETT, F. M. *The Steam Navy of the United States* (2 vols., 1897).

BIXBY, WILLIAM H. "River and Harbor Improvements under the Corps of Engineers, U. S. Army," in *Proceedings National Rivers and Harbors Congress, 1909, 1910*.

BURTON, THEODORE E. "Improving our Rivers and Harbors," in *The Independent*, LXX, 384, 1911).

BYALL, J. B. "The American System of Improving and Administering Commercial Facilities," in *Annals of American Academy of Political and Social Science*, xxiv, 1904, pp. 489-506).

COOLEY, LYMAN E. *The Diversion of the Waters of the Great Lakes by way of the Sanitary and Ship Canal of Chicago* (1913).

COOPER, J. FENIMORE. *History of the Navy of the United States of America* (1854).

- CROWELL, J. F. "The Shipping Industry of the United States and its Relation to the Foreign Trade," in *Monthly Summary of Commerce and Finance*, Dec. 1900, pp. 1373-1411.
- ENDICOTT, WILLIAM C., JR. (compiler). *Immigration Laws of the United States* (1887).
- FAIRLIE, J. A. *National Administration of the United States of America* (1905).
- GRIFFIN, A. P. C. *List of References on the U. S. Consular Service, with Appendix on Consular Systems in Foreign Countries* (Library of Congress, 1905).
- HARTS, W. W. "Some Desirable Governmental Policies for River Improvements," in *Bulletin American Economic Association*, 4th series, No. 2, 154, April 1911.
- HEPBURN, A. B. *Artificial Waterways and Commercial Development* (1909).
- HUNT, GAILLARD. *History of the Department of State* (1893).
- ILLINOIS CANAL COMMISSIONERS. *Annual Reports* (1912-1913).
- INGRAM, AUGUSTUS E. *Digest of Circular Instructions to Consular Officers* (Department of State, 1908).
- JOHNSON, EMORY R. "The Early History of the United States Consular Service, 1776-1792," in *Political Science Quarterly*, xiii, March 1898, p. 19.
- . Inland Waterway Policy, in *Bulletin American Economic Association*, 4th series, No. 2, 166, April 1911.
- . *Inland Waterways: Their Relation to Transportation* (1893).
- . "River and Harbor Bills," in *Annals of American Academy of Political and Social Science*, ii, May 1892, pp. 782-812.
- JOHNSTON, ALEXANDER. Internal Improvements, in *Cyclopedia of Political Science, Political Economy, and of the Political History of the United States* (J. J. Lalor, ed.), ii, 573, 1883.
- JONES, CHESTER LLOYD. *The Consular Service of the United States: Its History and Activities* (Publications, University of Pennsylvania, 1906).
- JONES, EVAN R. (ed.). *The Shipping World Year-Book* (annual, 1902-).
- KAPP, FRIEDRICH. *Immigration and the Commissioners of Emigration of the State of New York* (1870).
- KERR and MOLL. *Organization, Powers and Duties of Health Authorities* (U. S. Public Health Bulletin No. 54, 1912).
- MOXEY, EDWIN. Federal Quarantine Laws, in *Political Science Quarterly*, xxiii, 617, Dec. 1908.
- NATIONAL RIVERS AND HARBORS CONGRESS. *Proceedings* (annual, 1901-).
- NEW YORK BARGE CANAL TERMINAL COMMISSION. *Report and Proceedings* (2 vols., 1911).
- NEW YORK (STATE) COMMISSION OF IMMIGRATION. *Report* (1909).
- . COMMISSIONERS OF QUARANTINE. *Annual Reports* (1898, 1899, 1901).
- NEW YORK SUPERINTENDENT OF PUBLIC WORKS. *Annual Report on the Canals of the State* (1913).
- PORT ADMINISTRATION AND HARBOR FACILITIES: A SYMPOSIUM, in *Annals of American Academy of Political and Social Science*, xxix, 357-386, 1907.
- POWELL, BURT E. "Jefferson and the Consular Service," in *Political Science Quarterly*, xxi, 626, Dec. 1906.
- PURDY, T. C. *Report on the Canals of the United States* (in U. S. Census 1880, iv).
- REINSCH, PAUL S. *Public International Unions, etc.* (1911).
- RENNINGER, WARREN D. *Government Policy in Aid of American Shipbuilding* (A thesis; University of Pennsylvania, 1911).
- SHELTON, WILLIAM A. "The Lakes-to-the-Gulf Deep Waterway," etc. (in *Journal of Political Economy*, xx, Nos. 6, 7, 8, 1912).

386 *History of Domestic and Foreign Commerce.*

SMITH, R. A. C. *The Commerce and other Business of the Waterways of the State of New York, etc.* (Prepared for the governor of New York, etc., 1914).

SOLBY, J. R. *The Maritime Industries of the United States* (vol. 1, N. S. Shaler, *The United States of America*, 1894).

UNITED STATES:

Congress—

Laws of the United States Relating to the Improvement of Rivers and Harbors from August 11, 1790 to March 4, 1907 (House Doc. No. 425, 58 Cong., 3 sess., 2 vols., 1907).

House Reports—

Report of Lynch Committee on Causes of the Reduction of American Tonnage (No. 28, 41 Cong., 2 sess., vol. 1, 1870).

Report of Committee on Foreign Affairs on the Improvement of the Foreign Service (No. 840, 62 Cong., 2 sess., 1912).

Senate Reports—

Report of the Merchant Marine Commission (No. 2755, 58 Cong., 3 sess., 1905).

Department of Commerce—

Bureau of the Census (in Department Commerce and Labor, 1903-1913)—

Official Register of the United States (or Blue Book). (1816- . Biennial since 1817. 1 vol. 1816-1879; 2 vols. 1879- .) Issued by Department of State, 1816-1859; Department of the Interior, 1861-1905.

Bureau of Navigation (established 1884; in Department of Commerce and Labor, 1903-1913). *Annual Report*, 1884- .

Steamboat-Inspection Service (in Department of the Treasury, 1838-1903; Department of Commerce and Labor 1903-1913.) *Annual Report of Supervising Inspector-General* (1880-).

Department of Commerce and Labor (divided by act of March 4, 1913, into Department of Commerce and Department of Labor)—

Organization and Law of the Department of Commerce and Labor (1904).

Bureau of Foreign and Domestic Commerce, *Promotion of Commerce* (Miscellaneous Series Nos. 6, 6a, and 6b, 1911-1912).

Department of Labor—

Bureau of Immigration (in Department of the Treasury, 1891-1903; in Department of Commerce and Labor, 1903-1913). *Annual Report of Commissioner-General of Immigration* (1895-). Statistics of immigration collected by Department of State, 1819-1874; by Bureau of Statistics, Department of the Treasury, 1869-1895.

Department of the Navy—

Secretary, *Annual Report* (1823-).

Department of State—

Secretary—

History of Department of State (1901).

Outline of Organization and Work of the Department of State (1911).

Register of Department of State (annual, 1869-).

Department of the Treasury—

Public Health and Marine Hospital Service. *Annual Reports of Surgeon-General* (1872-).

Department of War—

Secretary, *Annual Report* (1823-).

URQUHART, G. D. (compiler). *Dues and Charges on Shipping in Foreign Ports* (1905).

VAN DYNE, FREDERICK. *Our Foreign Service: The A-B-C of American Diplomacy* (1909).

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